RHL 2011 catalogue

w: rhldirect.com
e: vents@rhldirect.com
t: 0845 124 6066
f: 0845 124 6067

This 2011 catalogue for you shows why we are recognised as being technologically innovative and bring products to market that are ahead of their time but are based on sound scientific principles.

Our focus for you is on quality and long term low cost of ownership in terms of long life, low maintenance and ease of use. Where we are committed to green issues and all our products adhere to the WEEE directive and are recyclable.

We offer customised products that we have manufactured on many schemes, often this follows direct involvement with system designs specially for you.

Member of:

FETA

HEVAC

Humidity Group
of the HEVAC Association

Accreditations:

exor
EXOR MANAGEMENT SERVICES LIMITED

TRUST MARK
Government Endorsed Standards

Warranty:

As RHL manufacture domestic ventilation products to the highest standards, all our products come with a two year replacement guarantee against any unlikely failure.

For contract works we offer a ‘two-part’ guarantee: during the second year of the warranty period we offer an RHL site visit to replace any faulty equipment.

Our address:

RHL
39 Suttons Business Park
Reading
Berkshire RG6 1AZ
United Kingdom

t: 0845 124 6066 f: 0845 124 6067

CONTENTS

RHL and the Environment	4
Preventing Damp and Condensation, Eliminating Mould	5
Bespoke Ventilation Solutions by RHL	6
AUTOSTAT smart humidity controller	7
RHL Fire Safe Fan Range	9
FOX FIRE SAFE two-room internal bathroom & WC fan	10
OTTER FIRE SAFE internal bathroom & WC fan	11
HUSKY FIRE SAFE intumescent kitchen ducted fan	12
DRYVENT B FIRE SAFE intumescent bathroom fan	13
DRYVENT K kitchen dehumidifier fan	14
DRYVENT B bathroom humidity control	15
DRYVENT X balanced ventilation condensation control	16
VAPOUR VENT passive dehumidifier	17
WOLF B & WOLF B TWIN auto low watt bathroom fans	18
DOLPHIN bathroom fan	19
SF12 bathroom fan	20
OTTER internal bathroom and WC fan	21
BADGER two room internal bathroom and WC fan	22
MOLE bathroom fan	23
MIXVENT INLINE high volume medium pressure fan	24
WOLF K & WOLF K TWIN kitchen fans	25
AS2 kitchen fan	26
DOLPHIN kitchen fan	27
HUSKY internal ducted kitchen fan	28
MULTI-ROOM kitchen, bathroom and WC fan	29
POLAR heat recovery ventilation	30
WEASEL WINDOW FRAME FAN for kitchen and bathroom	31
RHL DOUBLE GLAZED PANEL	32
RHL Ventilation Accessories	33
Remote AUTOSTAT Controller Installation	34
Ventilation and Building Regulations	35
RHL Fan Feature Matrix	38
RHL Fan Selection Chart	39
Wiring Diagrams	40
RHL Fan Dimensions	41

RHL AND THE ENVIRONMENT

Environmental protection is our priority - RHL recognizes its responsibility as a leading manufacturer and is continually striving to reduce the environmental impact of the work we do and the products we create.

Product design

Environmental consideration is part of the RHL design process - selecting eco-friendly raw materials and carefully planning their quantity, minimising energy consumption required for manufacturing and use, and the ease of recycling. Our AUTOSTAT smart humidity controllers with advanced software save energy with predictive control only operating the ventilation system when required, making all our products even more environmentally friendly. RHL continually refines its product design to maximize efficiency while minimizing waste.

Responsible Manufacturing

RHL helps to safeguard the environment by restricting the use of environmentally harmful compounds in our materials and manufacturing processes.

Energy efficiency

An electric device's greatest environmental impact is often its energy consumption over time. That is why RHL has made great strides in recent years to optimize the energy efficiency of our products - in recent years RHL have introduced a wide range of eco-friendly products that allow consumers to minimise the power consumption, including Heat Recovery Ventilator (ODYC HRV), and low energy consuming bathroom and kitchen fans.

Eco Friendly Products

RHL offer a comprehensive range of AUTOSTAT humidity controller equipped extractor fans that are eco friendly and contribute to sustainable living. The patented AUTOSTAT humidity controllers save electricity by constantly monitoring bathroom and kitchen environments and controlling the extractor fan action accordingly - the fans only operate when strictly necessary, significantly contributing to energy conservation.

Recycling of Products

RHL's approach to product design and manufacture enables consumers and businesses to dispose of used RHL equipment in an environmentally sound manner.

RHL recommends that customers dispose of their used ventilation equipment in an environmentally sound manner. Potential methods include reuse or recycling of products.

Waste Electrical and Electronic Equipment (WEEE)

In the European Union, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling. For information on h ow to responsibly recycle RHL products featuring this label, please call RHL on 0845 124 6066 or email vents@rhldirect.com.

Maglev Technology

Maglev fan technology provides a design created to provide superior performance, low noise and long life. By using magnetic levitation force, these fans feature zero friction with no contact between shaft and bearing. With excellent rotational stability, the fan eliminates vibration and typical wobble and shaking typically experienced in fan motors. It also provides excellent high temperature endurance that results in long life.

Preventing Damp and Condensation, Eliminating Mould.

In Great Britain, condensation and mould growth problems are reported within about 15% of properties.
Rodger Edwards "Handbook of Domestic Ventilation" Elsevier Butterworth-Heinemann, 2005

HOW CAN I PREVENT DAMP, CONDENSATION AND MOULD?

Firstly, it is necessary to make cooler surfaces located on the external walls less prone to condensate and mould. You can achieve this by improving air circulation around these areas and to let the ambient room temperature get at the cold surfaces and thereby increase the surface temperature above the dew point. This can mean using thinner curtains, pulling the bed/wardrobe away from the wall and rearranging the room to stop insulating the cold external wall surface.
Secondly, you need to regularly clear any signs of mould. Polycell 3 in 1 Mould Killer (please remember to use gloves) will kill mould spores. You need to throw out any material items that smell of mould and will not wash out.
Thirdly, you need to establish where and why certain areas in your house are affected by condensation and mould. Please think about the following moisture sources: metabolic evaporation, cooking, washing clothes, drying clothes indoors, dishwashing, washing/bathing, etc. All of these generate moisture in to the air.
Fourthly, what is happening to the moisture created in your kitchen and bathroom? Do you have automatic ventilators/fans? Are they effective? Do they have humidity controllers? Ideally, you should also have a passive air vent at high level in your bedroom.

HUMIDITY AND CONDENSATION

Humidity is a term used to describe moisture carried in air. Relative humidity (RH) is a measurement of the amount of moisture carried that the air can hold at a specific temperature. If the air in a room holds 50 percent of the moisture it is capable of holding at that temperature, its RH would be at 50 percent. Absolute humidity permeates uniform throughout a room, while RH varies from room to room. One hundred percent RH means that the air is completely saturated and can hold no more moisture.

Warm air holds more moisture than cool air. As air cools, it releases its moisture, which is why the highest RH in a room is near the coldest surface where warm air cools – as a result cold windows mist up, dew is forming up behind wardrobes and inside the back of wardrobes, or behind curtains, beds, etc.

HUMIDITY AND MICROBES

Bacterial growth increases below 30 percent RH and above 60 percent. Dust mites thrive in humidity levels above 50 percent. Hay fever incidents increase at levels above 60 percent RH and below 40 percent. Controlling humidity is essential to preserving quality indoor air. Note that humidity conditions and moisture are not solely to blame for microbial growth. Poor ventilation must also be improved to correct problems.

CONTROLLING HUMIDITY

Many buildings need to be dehumidified at various times of the year, based on changes of the season and other factors, to prevent indoor air that is too humid. Another integral component of controlling humidity is to locate and remove unwanted sources of moisture in the building, such as roof or plumbing leaks.

British Antarctic Survey

Challenge: boot locker activity - changing, washing and drying clothes following external activities, which significantly increases room humidity, causing damp, condensation and mould.

RHL solution: AUTOSTAT smart humidity controllers.

Customer benefits: AUTOSTAT controllers constantly monitor air humidity levels and manage ventilation fans to keep indoor air at optimal humidity levels. No user intervention is ever required, it's all automatic.

AUTOSTAT smart humidity controller

Broadwater Farm Estate, London

Challenge: need to update old ventilation fans without replacing the old ventilation ducts.

RHL solution: customised BEAVER fans with emulated fittings for old ducting positions.

Customer benefits: both powerful and energy efficient BEAVER fans professionally fitted with existing ducting left intact.

BEAVER fan

Luxurious Residence, London

Challenge: a well known Hollywood celebrity wants to overhaul bathroom ventilation during house renovations. The new system must be efficient, very quiet, reliable and completely unobtrusive.

RHL solution: customised TWIN INLINE fans with concealed AUTOSTAT smart humidity controllers.

Customer benefits: with powerful TWIN INLINE fans installed away from the bathroom there is no fan noise. AUTOSTAT sensors are placed inside ventilation grilles, making them both very effective and fully concealed. Fully guaranteed professional installation.

Ventilation grille with concealed AUTOSTAT smart humidity controller

TWIN INLINE fan

Spa Green Estate, London

Challenge: a heritage site requires new ventilation fans with minimal visual impact.

RHL solution: purpose made HUSKY fans with adaptors to go over air bricks within tops of larder cupboards.

Customer benefits: modern and efficient ventilation system, no visible internal or external extractor fans, prompt and hassle free professional installation.

HUSKY fan

Gambia House, London

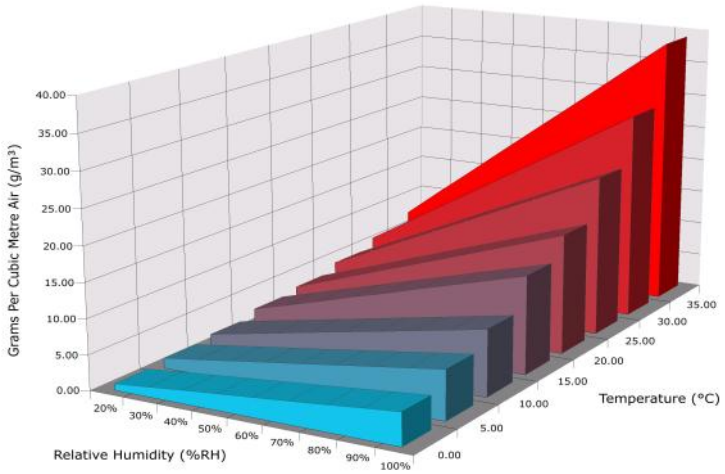
Challenge: a 20-story building with flats requires a new ventilation system that integrates well with the existing balanced flue heating system, both through a single fixed double glazed panel.

RHL solution: most flats feature custom made DOUBLE GLAZED PANEL made of acrylic and toughened glass. Precision cut panels feature both boiler flute and extractor fans with high level wind baffle. Other flats were fitted with custom designed and precision laser cut high level wind baffles, attached directly to the wall.

RHL DOUBLE GLAZED PANEL with dual vent

Customer benefits: all flats now feature a modern energy efficient fans installed without drilling holes in walls. A very neat design with prompt installation.

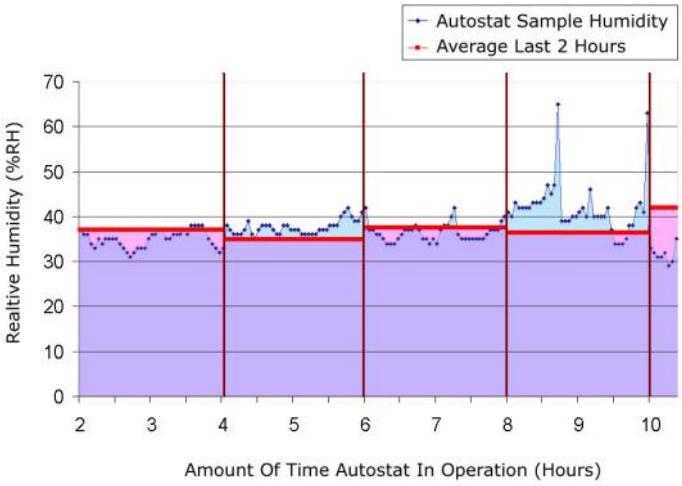
The AUTOSTAT is an intelligent, microprocessor driven controller for all domestic fans. Unlike conventional humidistats, AUTOSTAT is based on a determination of absolute humidity, not relative humidity. The important difference between the two is that absolute humidity is not affected by the temperature of the surrounding environment, making the AUTOSTAT perfectly suited to environments with widely fluctuating air moisture content.



By way of example, cooking and tumble dryers produce copious amounts of water vapour, however a local RH% controller would register only a slight increase in RH% due to a simultaneous increase in temperature, causing the air to hold more moisture (see graph below). Increased ventilation would therefore not be triggered. The AUTOSTAT would however identify a change in the moisture content of the air and react accordingly.

AUTOSTAT Operation

The AUTOSTAT samples the surrounding environment at regular intervals, stores and averages the results over the previous two hours and uses this as a reference base of humidity for the next two hours. When the measured humidity exceeds this reference base by a predetermined amount the controller triggers action, as illustrated in the graph to the right.



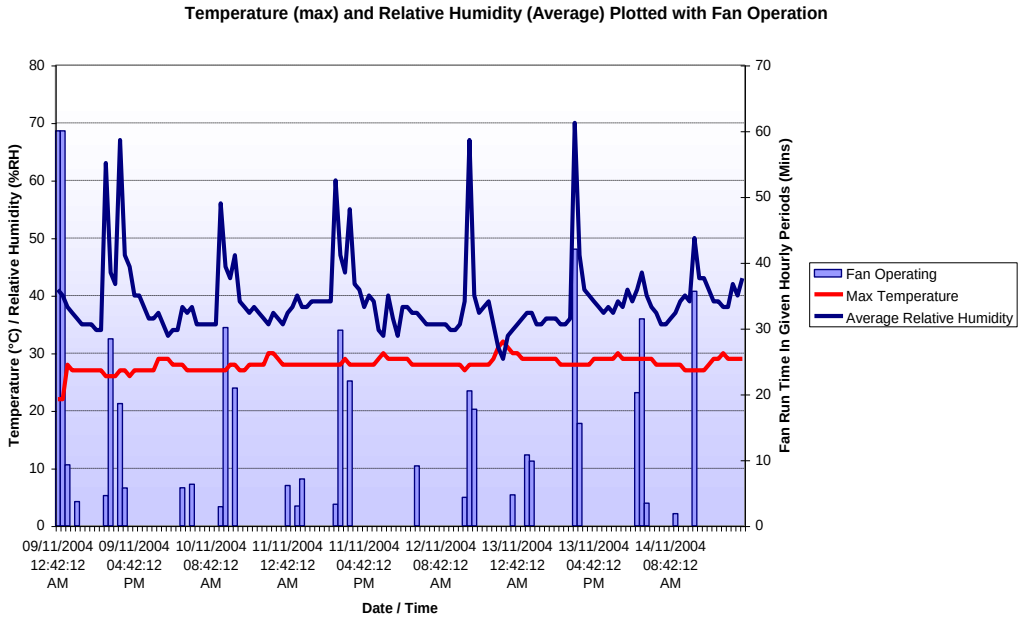
Another sample is taken after a few, the difference between this and the initial trigger reading is used to calculate a total running time for the ventilation equipment to operate. This mechanism results in the ventilation not being influenced by humidity noise, resulting in much more consistent in its operation.

RHL's AUTOSTAT humidity controller ensures low fan power consumption by constantly monitoring the humidity and temperature levels, and triggering the extractor fan only when necessary.

ECO FRIENDLY

Data Logger Download to MS Excel Spreadsheet

RHL provides AUTOSTAT data-logging software: when connected to an AUTOSTAT via the program header the software is able to download data held within the internal data logger and save it in a *.csv (comma separated value) file which can be imported by almost all spreadsheet packages.
There are three types of logs reported: hourly log, six-hourly log and power logs - they all allow for swift identification of condensation issues that may need attention.



AUTOSTAT Options

AUTOSTAT is pre programmed at the factory and will not require adjustment throughout its lifetime. The units operate on 240V AC and 12V AC/DC and provide output control through relay load output position 1.

- Integral override on pull switch;
- Remote override on;
- Light switch trigger with proportional on time hold;
- Voltage free output control with switch over relay;
- On board program header, with Autostat IV programming software available from website;
- Link settings for 12/240v ac or voltage free relay (items factory set);
- Autostat IV spreadsheet to generate custom graphs on downloaded log data;
- Tri-coloured LED Status indicator;
- Extensive User Manual, covering all Autostat IV software and Autostat operations available for download on request.

The AUTOSTAT is protected by the following patents 2316188 (UK), 6230980B1 (US), 2262657(Canada) H10-509502 (Japan), 0917677 (Ireland) and International Patent PC/GB97/02155.

Item	Part No.	Kit Contents
12V Autostat IV with data log	**Autostat-IV-12V**	12V Autostat IV, mounting screws, installation instructions
12V Autostat IV with data log and pull cord	**Autostat-IV-12VP**	12V Autostat IV, mounting screws, installation instructions
240V Autostat IV with data log	**Autostat-IV-240V**	240V Autostat IV, mounting screws, installation instructions

INTUMESCENT FANS

single room	two room	kitchen	condensation
FOX	**OTTER**	**HUSKY**	**DRYVENT B**
A specialist two-room (bathroom and WC) fire safe fan with timed overrun feature	A single-room bathroom fire safe fan with timed over-run feature	High performance kitchen ducted fire safe fan	High performance bathroom fire safe fan for condensation control
Page 10	Page 11	Page 12	Page 13

RHL Fire Safe fans feature intumescent fire protection system which expands and closes off the air duct in the event of a fire providing protection against the spread of fire (now a building regulation requirement), conforming to BS476:Part 20:1987

They are equipped with metal connection assembly to ensure integrity to fire protection system and intumescent seal and fans within metal section with no reduction to fan performance.

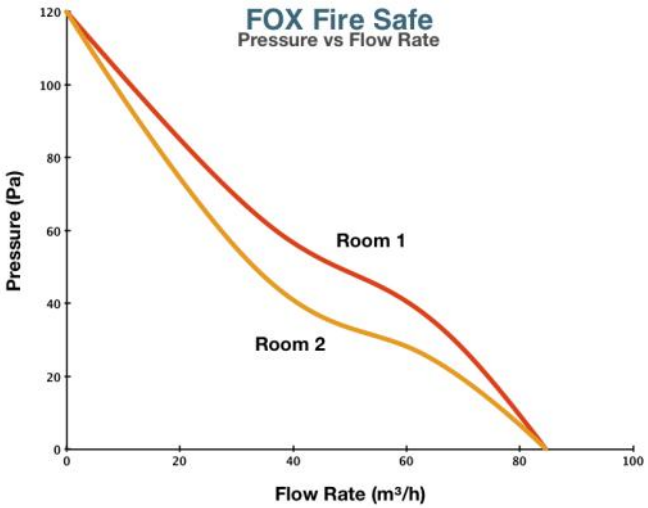
FOX FIRE SAFE two-room internal bathroom & WC fan

The FOX Fire Safe (FOX FS) is a specialist two-room (bathroom and WC) fan with timed overrun. Its fire safety properties are due to an intumescent seal contained within the metal connecting section which expands when exposed to high temperatures. An added benefit is that sound transmission is reduced making it the ideal solution for communal ducted systems.

The fan supplied as standard with two interchangeable intumescent cartridges so that the installer is able to easily place the cartridge as required.. One intumescent outlet connects to the ducted system and the other provides fire protection for the second room.
The low-watt fan system operates on an overrun proportional timer activated by the light switches in either room. The FOX Fire Safe utilises two energy efficient MagLev motors, offering great efficiency, quiet operation and exceptionally long life (up to 50,000 hours of operation). No user or installation set up is required.

Features and Benefits:

- Integral Intumescent fire protection system which expands and closes off the air duct in the event of a fire providing protection against the spread of fire. Now a building regulation requirement. Conforming to BS476: Part 20:1987
- Metal connection assembly to ensure integrity to fire protection system
- Intumescent seal and fans within metal section with no reduction to fan performance
- The FOX FS is programmed for proportional timer control from each room so is energy efficient and does not run unnecessarily
- Incorporates Maglev DC fan motors – designed to operate for 50,000+ hours fault free which means:
- Almost silent operation
- Cost effective as it is inexpensive to run, low maintenance and has a long life.
- Can be fixed in any orientation without affecting performance (wall, ceiling)
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing.
- Produces up to 85m³/h of air flow thereby conforming to building regulations part F
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind
- 12V Power Supply / Timer or 240V supply options with IP54 connection for new or replacement systems and so is safe for use in wet areas i.e. Zone 1.



Performance:

FOX FS 240V : 85m³/h 4W 120Pa 28dB
FOX FS 12V : 85m³/h 4W 120Pa 28dB

Item	Part No.	Kit Contents
FOX Fire Safe 240V	**FOX FS 240**	240V FOX Fire Safe fan with two room timer overrun and IP54 connection intumescent fan+ back draft valve
FOX Fire Safe 12V	**FOX FS 12**	12V FOX Fire Safe fan with two room remote transformer and timer overrun intumescent fan+ back draft valve

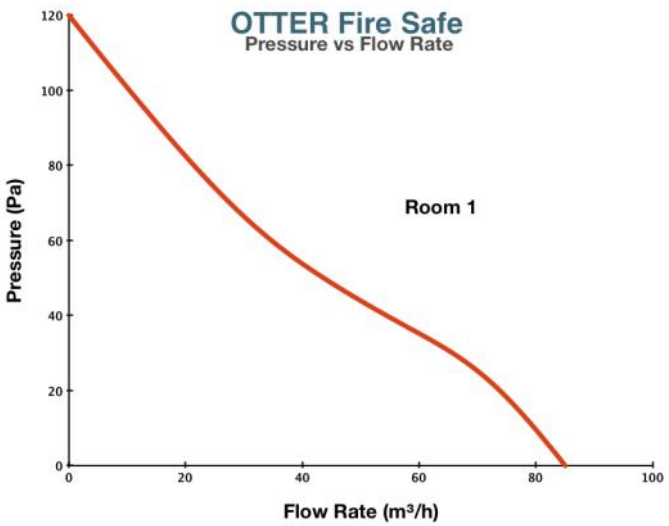
OTTER FIRE SAFE internal bathroom & WC fan

The OTTER Fire Safe bathroom fan is a single room fan with timed overrun feature. Its fire safety properties are due to an intumescent seal contained within the metal connecting section which expands when exposed to high temperatures. An added benefit is that sound transmission is reduced making it the ideal solution for communal ducted systems.

The low watt fan system operates on an overrun proportional timer activated by the light switch. The OTTER utilises an energy efficient MagLev motor, offering great efficiency, quiet operation and exceptionally long life (up to 50,000 hours of operation). No user or installation set up is required.

Features and Benefits:

- Integral intumescent fire protection system which expands and closes off the air duct in the event of a fire providing protection against the spread of fire. Now a building regulation requirement. Conforming to BS476:Part 20:1987
- Metal connection assembly to ensure integrity to fire protection system
- Intumescent seal and fans within metal section with no reduction to fan performance
- Incorporates MagLev DC fan motors – designed to operate for 50,000+ hours fault free which means:
  - Almost silent operation Cost effective as it is inexpensive to run, low maintenance and has a long life
  - Can be fixed in any orientation without affecting performance (wall, ceiling)
  - Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing.
- Produces up to 110m3/h of air flow thereby conforming to building regulations part F
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind
- 12V Power Supply / Timer or 240V supply options with IP54 connection for new or replacement systems and so is safe for use in wet areas i.e. Zone 1.
- The OTTER is programmed for proportional timer control so is energy efficient and does not run unnecessarily
- Sound dampener – to reduce sound transmission;
- Hand removable front grilles – these dishwasher safe front grilles are easy to clean (fixed and tamper proof grille fittings are available for public locations).



Performance:

OTTER Fire Safe 240V : 85m³/h 4W 120Pa 28dB
OTTER Fire Safe 12V : 85m³/h 4W 120Pa 28dB

Item	Part No.	Kit Contents
OTTER Fire Safe 240V	**OTTER F**	OTTER intumescent fan, back draft plate
OTTER Fire Safe 12V	**OTTER FT**	OTTER intumescent fan, back draft plate, remote 12V transformer

HUSKY FIRE SAFE intumescent kitchen ducted fan

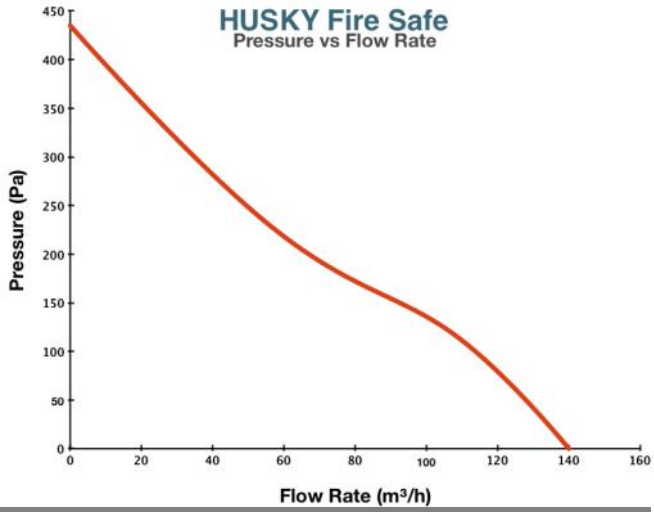
The single room ventilation HUSKY fan is engineered to be durable, efficient, quiet and easy to maintain. It is used for internal ducted applications containing two radial fans providing a flow rate of 30l/s at over 100 Pascal's this will conform to building regulation air flow requirements in a domestic kitchen when located above or adjacent to the cooker.

Its fire safety properties are due to an intumescent seal contained within its inner metal casing and connecting section, the intumescent expands when exposed to high temperatures.

An added benefit is that sound transmission is reduced making it the ideal solution for communal ducted systems. HUSKY is powered by energy efficient brushless DC motors offering great efficiency, quiet operation and exceptionally long life with the vibration absorbing and sound deadened chassis is made of robust polycarbonate/ABS polymer. The integral Autostat provides for automatic humidity control. No user or installation set up is required.

Features and Benefits:

- Integral Intumescent fire protection system which expands and closes off the air duct in the event of a fire providing protection against the spread of fire. Now a building regulation requirement. Conforming to BS476:Part 20:1987
- Metal connection assembly to ensure integrity to fire protection system
- Intumescent seal and fans within metal section with no reduction to fan performance
- Produces over 110m³/h at 100Pa overcoming air flow resistance in the most demanding situations of air flow in to 100mm ducting thereby conforming to building regulations part F
- A built in Autostat humidity controller with pull cord override and LED indicator to show what mode the fan is in.
- Incorporates DC brushless technology which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling, window)
- A removable stainless steel filter, which is dish washer safe, protects the fan blades and shutters giving longer life
- The internal Autostat (humidity controller) is perfectly in tune with normal living conditions and;
  Responds to changes (and uniquely, small changes) in air humidity therefore requiring no manual adjustment to retain the air quality in your home
  Incorporates a data-logger that captures humidity, temperature and fan operation providing details on the dwelling air quality for improved condensation control



Performance:

HUSKY 100FA : 140m³/h 16W 435Pa 29dB
HUSKY 100FSA : 140m³/h 16W 435Pa 29dB

Item	Part No.	Kit Contents
HUSKY FS fan with 100mm spigot	**HUSKY-FS**	HUSKY 100 fan with 100mm spigot,
HUSKY FSA fan with 100mm spigot and onboard AUTOSTAT	**HUSKY-FSA**	HUSKY 100 fan with 100mm spigot, internal Autostat

DRYVENT B FIRE SAFE intumescent bathroom fan

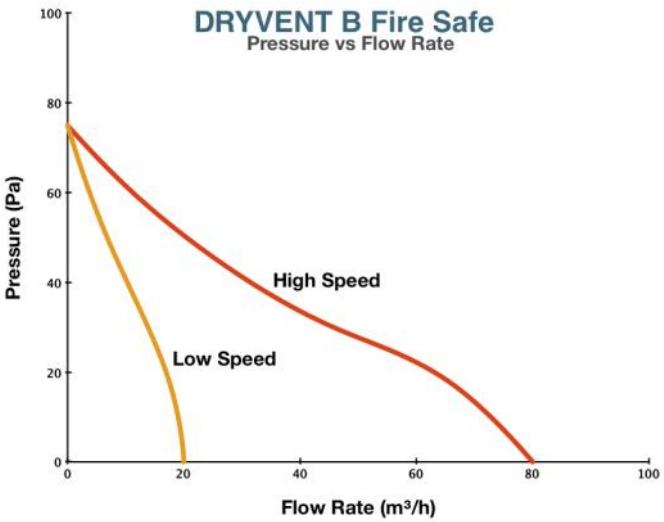
The DRYVENT B bathroom fan is a high performance, dehumidifying fan designed for particularly demanding condensation control requirements of bathroom environments. It is particularly effective for use in properties suffering from damp conditions. Its fire safety properties are due to an intumescent seal contained within the metal connecting section which expands when exposed to high temperatures. An added benefit is that sound transmission is reduced making it the ideal solution for communal ducted systems.

DRYVENT B continually extracts on low speed to remove moisture laden air at source before it can condense. This background level of ventilation also improves the air quality throughout the property.

This condensation control is achieved through the inclusion of an internal, microprocessor driven Autostat unit. When the built-in Autostat detects the humidity level rising above acceptable levels the fan triggers into high speed delivering powerful performance
when it is needed most.

Features and Benefits:

- Incorporates the RHL Autostat humidity controller which continually monitors ambient humidity and automatically adjusts the control level accordingly
- Integral Intumescent fire protection system which expands and closes off the air duct in the event of a fire providing protection against the spread of fire. Now a building regulation requirement. Conforming to BS476:Part 20:1987
- Metal connection assembly to ensure integrity to fire protection system
- Intumescent seal and fans within metal section with no reduction to fan performance
- Low energy, low cost continuous running at 20m³/h (Low speed)
- Automatic switch to high speed when required
- Incorporates MagLev DC fan motors - designed to operate for 50,000+ hours fault free which means: Almost silent operation Cost effective as it is inexpensive to run, low maintenance and has a long life.
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing.
- Produces up to 80m³/h of air flow thereby conforming to building regulations part F
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind
- 12v Power Supply / Timer or 230v supply options with IP54 connection for new or replacement systems and so is safe for use in wet areas i.e. Zone 1
- The Dryvent B is programmed for proportional timer control so is energy efficient and does not run unnecessarily
- Manual override option via light switch



Performance:

DRYVENT BFS 230V : 20-80m³/h 5.6W 75Pa 30dB
DRYVENT BFS 12V : 20-80m³/h 5.6W 75Pa 30dB

Item	Part No.	Kit Contents
DRYVENT BFS 230V	**DRYVENT BFS 230V**	DRYVENT BFS 230V maglev fan for wall or ducting installation, internal AUTOSTAT
DRYVENT BFS 12V	**DRYVENT BFS 12V**	DRYVENT BFS 230V maglev fan for wall or ducting installation, internal AUTOSTAT, remote 12V transformer

DRYVENT K kitchen dehumidifier fan

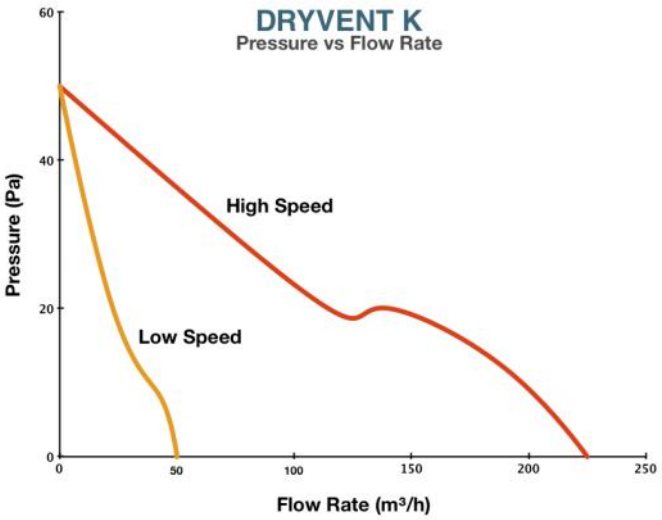
The DRYVENT K Kitchen fan is a high performance, dehumidifying fan designed for the particularly demanding condensation control requirements of kitchen environments. It is particularly effective for use in properties suffering from damp conditions. DRYVENT K continually extracts on low speed to remove moisture laden air at source before it can condense. This background level of ventilation also improves the air quality throughout the property.
This condensation control is achieved through the inclusion of an internal, microprocessor driven Autostat unit. When the built-in Autostat detects the humidity level rising above acceptable levels the fan triggers into high speed delivering powerful performance when it is needed most.

ECO FRIENDLY

DRYVENT K incorporates **5 WATT MagLev** motor

Features and Benefits:

- Incorporates the RHL Autostat humidity controller which continually monitors ambient humidity and automatically adjusts the control level accordingly
- Low energy, low cost continuous running at 50m³/h (Low speed)
- Incorporates a data-logger that captures humidity, temperature and fan operation providing details on the dwelling air quality for improved condensation control management
- Automatic switch to high speed when required and pull cord override
- A removable stainless steel filter, which is dish washable, protects the fan blades and shutters giving longer life
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing. Not only does this give you more choice in fan location but also a more effective ventilation system and removal of cooking moisture and odours
- The DRYVENT K has a built in LED indicator to show what mode the fan is in.
- Produces up to 225m³/h of air flow thereby conforming to building regulations part F
- Incorporates MagLev DC fan motors - designed to operate for 50,000+ hours fault free which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling)
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind



Performance:

Dryvent K 240V : 50-225m³/h 5W 50Pa 30dB

Item	Part No.	Kit Contents
Dryvent K + kit for wall installation	**DRYVENT K**	Dryvent K fan with wall sleeve and external grille
Dryvent K for single glazed window installation	**DRYVENT K-P**	Dryvent K fan with window fixing kit with external grille
Dryvent K for single glazed window installation	**DRYVENT K DG ACR**	Dryvent K fan with Designer base with screws for acrylic fixing

DRYVENT B bathroom humidity control

The Dryvent B bathroom fan is a high performance, dehumidifying fan designed for particularly demanding condensation control requirements of bathroom environments. It is particularly effective for use in properties suffering from damp conditions.
Dryvent B continually extracts on low speed to remove moisture laden air at source before it can condense. This background level of ventilation also improves the air quality throughout the property.

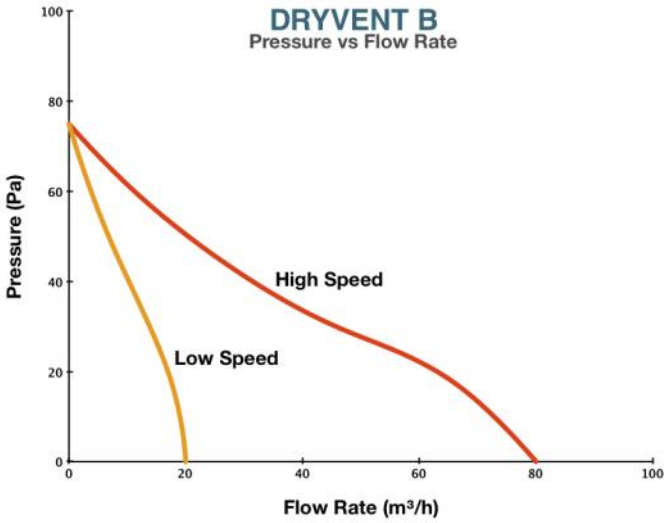
This condensation control is achieved through the inclusion of an internal, microprocessor driven Autostat unit. When the built-in Autostat detects the humidity level rising above acceptable levels the fan triggers into high speed delivering powerful performance when it is needed most.

Features and Benefits:

- Incorporates the RHL Autostat humidity controller which continually monitors ambient humidity and automatically adjusts the control level accordingly
- Low energy, low cost continuous running at 20m³/h (Low speed)
- Incorporates a data-logger that captures humidity, temperature and fan operation providing details on the dwelling air quality for improved condensation control management
- Automatic switch to high speed when required
- Incorporates MagLev DC fan motors - designed to operate for 50,000+ hours fault free which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling)
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing.
- Produces up to 80m³/h of air flow thereby conforming to building regulations part F
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind
- 12v Power Supply / Timer or 240v supply options with IP54 connection for new or replacement systems and so is safe for use in wet areas i.e. Zone 1

ECO FRIENDLY

DRYVENT B uses only **5.6 WATTS** of electricity



Performance:

Dryvent B 240V : 20-80m³/h 5.6W 75Pa 30dB
Dryvent B 240V : 20-80m³/h 5.6W 75Pa 30dB

Item	Part No.	Kit Contents
DRYVENT B for wall installation or ducting	**DRYVENT B 240V**	Dryvent B fan with internal 12V Transformer and Autostat
DRYVENT B for wall installation or ducting	**DRYVENT B 12V**	Dryvent B fan with internal Autostat remote 12V transformer

DRYVENT X balanced ventilation condensation control

The DRYVENT X fan is a high performance, attractively styled fan, designed to operate as a low level background de-humidifier by providing filtered fresh air and extracting moist air simultaneously.

It is suitable for use in bedrooms, living spaces and also for store rooms and other confined areas - for example in an under stairs cupboard.

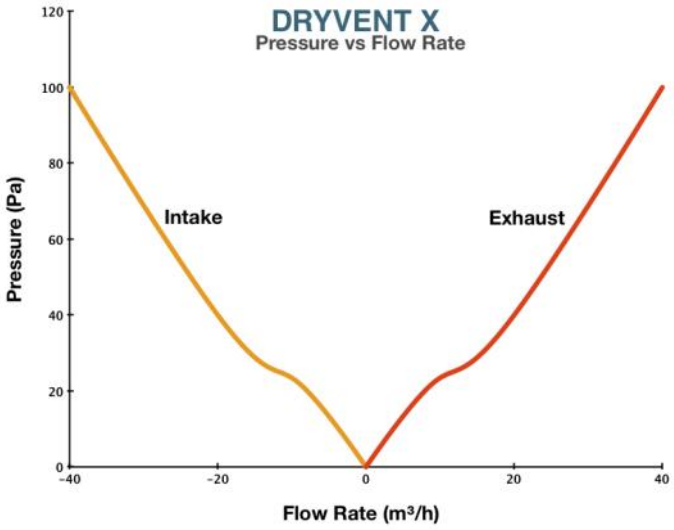
DRYVENT X uses continual intake/extract operations to generate a local plume of dry air of lower vapour pressure than the atmosphere in the room, meaning the fan operates by drawing out humidity from the air in a room whilst drawing in fresh air from the outside.

Features and Benefits:

- Low energy dehumidification via balanced ventilation for low running cost
- Continuous extraction and intake at low speed (20 m^3/h) providing proactive condensation reduction whilst avoiding the transfer of condensation from more vapour rich environments eg the kitchen and bathroom
- Foam filtration system which allows in fresh air whilst filtering out larger airborne particles like pollen and also produces a sound dampening effect to ensure silent operation
- Incorporates MagLev DC fan motors - designed to operate for 50,000+ hours fault free which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling)
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing.
- Produces up to 80m³/h of air flow thereby conforming to building regulations part F
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind

ECO FRIENDLY

DRYVENT X incorporates 2X **2 WATT MagLev** motors.



Performance:

DRYVENT X: 20m³/h 4W 100Pa 30dB

Item	Part No.	Kit Contents
DRYVENT X for wall installation in bedroom, living spaces and confined areas	**DRYVENT X**	DRYVENT X fan with split wall sleeve and external wall sleeve

VAPOUR VENT passive dehumidifier

The VAPOUR VENT alleviates condensation and mould by allowing water vapour to pass to the outside whilst restricting draughts and thereby minimising heat loss.

It is ideal for use in bedrooms or living spaces and in particularly cold areas and is most effective when used in conjunction with RHL MagLev Dryvent kitchen or bathroom fan solutions. Essentially the VAPOUR VENT compliments a ventilation system by creating a vent point for the moist air (high vapour pressure to low vapour pressure) and by enabling replacement air to enter the property and replenish the extracted air throughout the building. It is designed to be fitted through an exterior wall and requires a 125mm or 150mm circular aperture.

Features and Benefits:

- Contains a permeable membrane which encourages moisture migration and provides effective ventilation thereby alleviating condensation and mould
- The membrane restricts draughts so moisture control of the bedroom (or other living areas) is achieved without discomfort to the occupants
- Concurrently provides fresh air whilst allowing the vapour to be removed
- Provides a relatively cooler surface to attract the moisture away from cold problem areas as well as encouraging air flow by natural convection.
- Extracts vapour passively and silently so it is unobtrusive and costs nothing to run
- Provides maximum condensation control and benefit when installed as part of a Dryvent solution
- 5 year guarantee

Why Passive Ventilation compliments Extractor Systems:

Condensation control extractor fans run continuously and automatically extract at high level to remove moisture that has just been created at source, for example when cooking or bathing. This is when air has the highest humidity and vapour content, and is most likely if not extracted, to migrate to colder parts of a property and condense. By continually extracting air the nascent moisture is removed, but also in effect it creates a vacuum which will suck air in from areas of least resistance, such as through floor boards and through service vents, which usually have high levels of contamination or stagnant air associated with them. Without replacing the air it is also possible to cause undesirable short circuiting of air flow to gas appliances.

Passive ventilation provides a structured solution for air management where the positioning of the vent/s dictates the air movement though the building. The increased movement of air will also have an overall drying effect.

Item	Part No.	Kit Contents
Vapour Vent 125mm	**V125**	125mm diameter telescopic tube, internal vapour membrane, external and internal grille
Vapour Vent 150mm	**V150**	150mm diameter telescopic tube, internal vapour membrane, external and internal grille
Vapour Vent 150mm with high level push through grille	**V150P**	150mm diameter tube, internal vapour membrane, push through circular external grille with seal, internal grille

WOLF B & WOLF B TWIN auto low watt bathroom fans

The ultra energy efficient WOLF B bathroom fan is designed for the demanding moisture extraction requirements of the bathroom, providing a drier and healthier home. The powerful WOLF B TWIN bathroom fan is designed for internal bathrooms where there is an extended duct run to the outside.

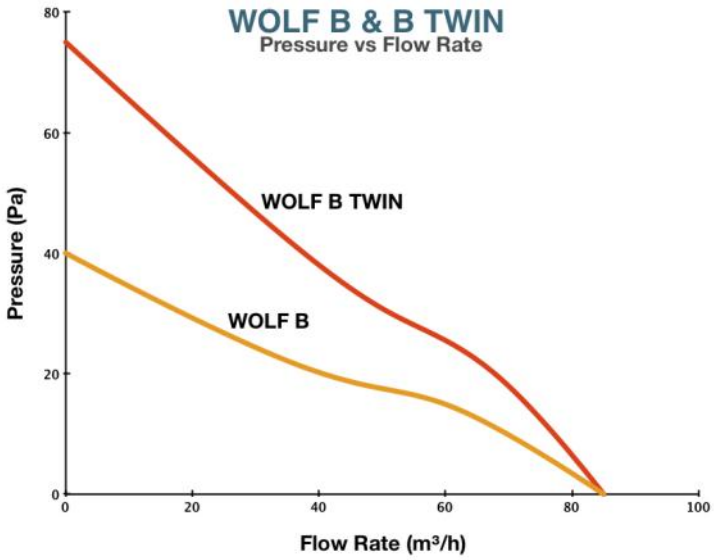
The operation of WOLF B and WOLF B-TWIN are fully automatic. The built-in AUTOSTAT humidity controller monitors bathroom humidity levels around the clock. There are no user adjustments and only a single pull cord control.

Features and Benefits:

- Incorporates a brushless motor which means:
  - Quiet operation
  - Cost effective as it is relatively inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling, window)
- Quiet electromechanical automatic shutters operate silently and prevent drafts
- A remote 12V SELV transformer is included as standard (the preferred option for wet environments)
- The WOLF B / B TWIN have a built in power on indicator to show what mode the fan is in.
- Produces up to 90m³/h of air flow thereby conforming to building regulations part F
- 2 year guarantee giving peace of mind

ECO FRIENDLY

WOLF B uses only **8 WATTS** of electricity



Performance:

WOLF B Bathroom Fan: 85m³/h 4W 40PA 36dB
WOLF B TWIN: 85m³/h 8W 75PA 36dB

Item	Part No.	Kit Contents
Fan + kit for wall installation	**WOLF B - WALL**	Wall sleeve & external grille, 12V transformer
Fan + kit for single & double glazed window installation	**WOLF B - P WINDOW**	Window fixing kit with external grille, 12V transformer
Fan + kit for acrylic double glazed window installation	**WOLF B -DG ACR**	Designer base with screws for acrylic fixing, 12V transformer
Fan	**WOLF-B-TWIN**	WOLF B TWIN fan only, 12V transformer
Fan + kit for wall installation	**WOLF-B-T-KIT**	WOLF B TWIN fan, AUTOSTAT IV, 12V transformer, external grille, mounting kit

DOLPHIN bathroom fan

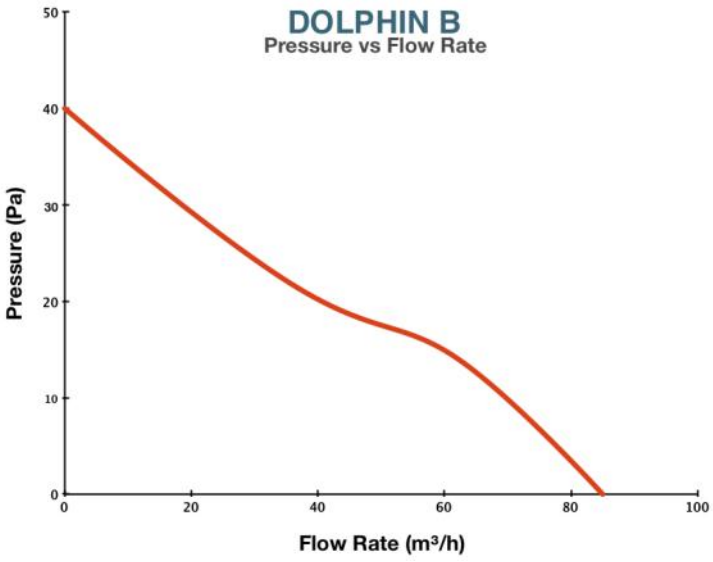
The DOLPHIN Bathroom fan is a powerful entry level fan suitable for everyday use in domestic bathrooms and WCs. It has a high temperature resistant case with a stainless steel filter that can be removed and placed in the dishwasher. As with all RHL products it offers best value for reduced noise level and long life.

The fan is operated by pull cord which offers complete, instant and simple control.
This DOLPHIN is supplied as a simple fan unit with fitting options available depending upon the installation requirements.

Features and Benefits:

- Incorporates a brushless motor which means:
  - Quiet operation
  - Cost effective as it is relatively inexpensive to run, low maintenance and has a long life.
- Can be fixed in any orientation without affecting performance (wall, ceiling, window)
- Quiet electromechanical automatic shutters operate silently and prevent drafts
- A remote 12V SELV transformer is included as standard (the preferred option for wet environments)
- The DOLPHIN has a built in power on indicator to show what mode the fan is in.
- Produces up to 90m³/h of air flow thereby conforming to building regulations part F
- 2 year guarantee giving peace of mind

DOLPHIN complies with the WEEE directive.



Performance:

DOLPHIN Bathroom Fan: 85m³/h 5W 40Pa 35dB

Item	Part No.	Kit Contents
Fan	**DOLPHIN B**	12V fan
Wall kit	**100mm wall kit**	Telescopic wall sleeve and brown external grille
Window kit	**100mm window kit**	Off white external grille with single/double glazing fixing kit

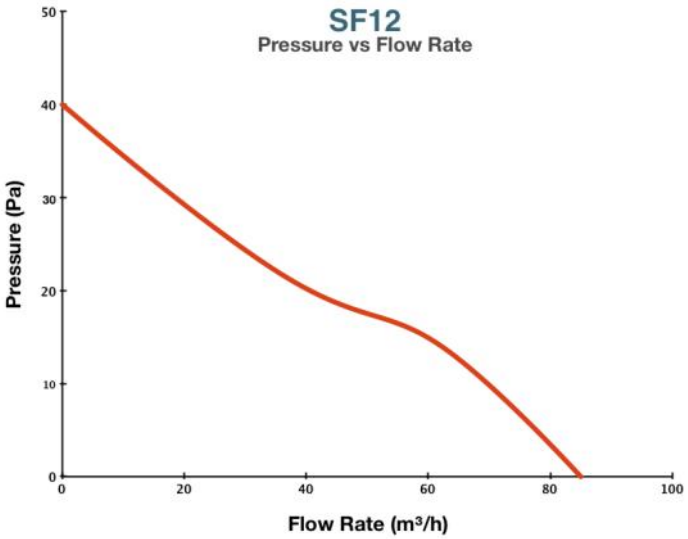
SF12 bathroom fan

The ultra energy efficient SF12 bathroom fan is designed for the demanding moisture extraction requirements of the bathroom, providing a drier and healthier home.

The operation of SF12 is fully automatic. The remote AUTOSTAT humidity controller allows for optimum positioning of the unit and monitors bathroom humidity levels around the clock. There are no user adjustments to the AUTOSTAT and only a single pull cord control to manually override the fan to ON.

Features and Benefits:

- Incorporates MagLev technology which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling, window)
- Electromechanical automatic shutters operate silently and prevent drafts
- The remote AUTOSTAT (humidity controller) is perfectly in tune with normal living conditions and;
  - Responds to changes (and uniquely, small changes) in air humidity requiring no manual adjustment to retain the air quality in your home
  - Incorporates a data-logger that captures humidity, temperature and fan operation providing details on the dwelling air quality for improved condensation control management
- A remote 12V SELV transformer is included as standard (the preferred option for wet environments)
- Produces up to 85m³/h of air flow thereby conforming to building regulations part F
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind



Performance:

SF12 Bathroom Fan: 85m³/h 4W 40PA 36dB

Item	Part No.	Kit Contents
SF12 fan	**SF12-FAN**	SF12 fan only
SF12 wall kit	**SF12-KIT**	SF12 fan, Autostat IV, 12V transformer, external grille, mounting kit
SF12 window kit	**SF12P-KIT**	SF12 fan, Autostat IV, 12V transformer, window mounting kit
SF12 double glazing kit	**SF12-DG**	SF12 fan, Autostat IV, 12V transformer, RHL DDG panel mounting kit

OTTER internal bathroom and WC fan

The OTTER bathroom fan is a single room fan with timed overrun feature and is particularly suitable for a ducted system as with it's high performance motors it can extract air over extended distances.

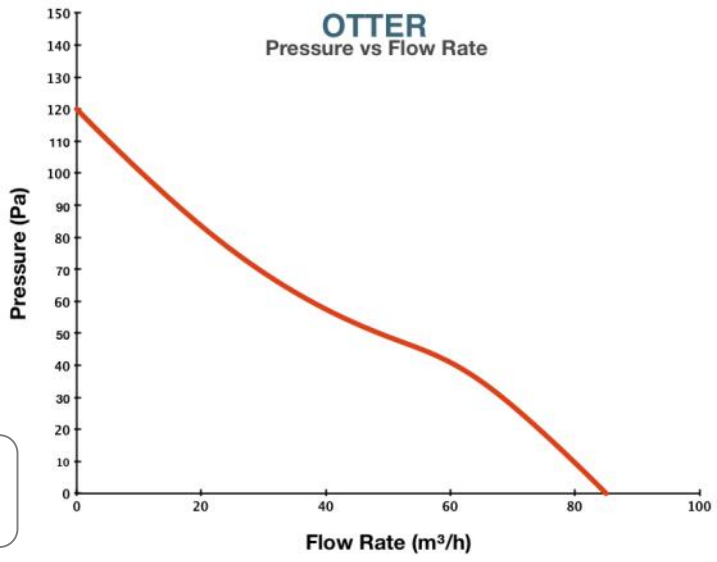
The low-watt fan system operates on an overrun proportional timer activated by the light switch. The OTTER utilises an energy efficient MagLev motor, offering great efficiency, quiet operation and exceptionally long life (up to 50,000 hours of operation). No user or installation set up is required.

Features and Benefits:

- Incorporates Maglev DC fan motors - designed to operate for 50,000+ hours fault free which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling)
  - High performance low wattage energy efficient solution for ducted systems
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing.
- Produces up to 110m³/h of air flow thereby conforming to building regulations part F
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind
- 12V Power Supply / Timer or 240v supply options with IP54 connection for new or replacement systems and so is safe for use in wet areas i.e. Zone 1.
- The OTTER is programmed for proportional timer control so is energy efficient and does not run unnecessarily
- Hand removable front grilles - these dishwasher safe front grilles are easy to clean (fixed and tamper proof grille fittings are available for public locations).

ECO FRIENDLY

OTTER incorporates 2X **2 WATT MagLev** motors.



Performance:

OTTER 240V: 85m³/h 4W 120PA 28dB
OTTER 12V: 85m³/h 4W 120PA 28dB

Item	Part No.	Kit Contents
OTTER 240V	OTTER	OTTER 240V fan with back draft valve
OTTER 12V	OTTER T	OTTER 12V fan with back draft valve and remote 12V transformer

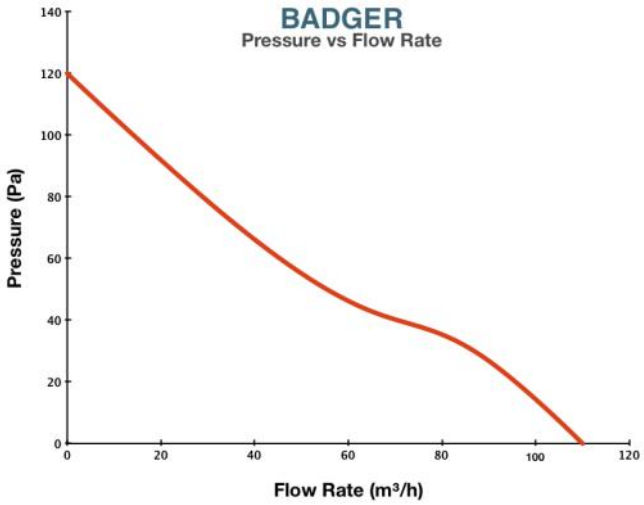
BADGER two room internal bathroom and WC fan

The BADGER is a specialist two-room (bathroom and WC) fan with timed overrun. The fan ships as standard with two apertures and blanking plates on the back panel so that the installer is able to easily place the spigot as required. There is also a separately orderable optional front spigot plate. A further separate version of the BADGER with a top spigot is available as a special order item. These options make this fan highly versatile and suitable for replacing most manufacturers older or obsolete fans in existing ventilation installations.

The low-watt fan system operates on an overrun proportional timer activated by the light switches in either room. The BADGER utilises an energy efficient MagLev motor, offering great efficiency, quiet operation and exceptionally long life (up to 50,000 hours of operation). No user or installation set up is required.

Features and Benefits:

- Highly adaptable spigot configuration so suitable for replacing existing older or obsolete fans without modification of the ducting.
- Extracts from two rooms simultaneously into a single duct which is a more efficient use of space and easier to maintain.
- Incorporates Maglev DC fan motors - designed to operate for 50,000+ hours fault free which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling)
- Produces up to 110m³/h of air flow thereby conforming to building regulations part F
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind
- 12V Power Supply / Timer or 240v supply options with IP54 connection for new or replacement systems and so is safe for use in wet areas i.e. Zone 1.
- The BADGER is programmed for proportional timer control from each room so is energy efficient and does not run unnecessarily
- Hand removable front grilles - these dishwasher safe front grilles are easy to clean (fixed and tamper proof grille fittings are available for public locations).



Performance:

BADGER 240V: 110m³/h 6W 120PA 28dB
BADGER 12V: 110m³/h 6W 120PA 28dB

Item	Part No.	Kit Contents
BADGER 240V	BADGER 240	BADGER fan with two room timer overrun and IP54 connection
BADGER 12V	BADGER 12	BADGER fan with two room remote transformer and timer overrun
BADGER top spigot option	OPTION T	BADGER housing with 68mm aperture located on top for second room intake port
BADGER front spigot option	OPTION F	BADGER front grille replacement plate with integrated second room intake port

MOLE bathroom fan

The MOLE bathroom fan quickly and quietly removes humidity and stale air from internal bathrooms or from bathrooms where there are no opening windows. It features a very powerful 12V brushless motor and a remote transformer with timer overrun.

MOLE wall fan MOLE ceiling fan

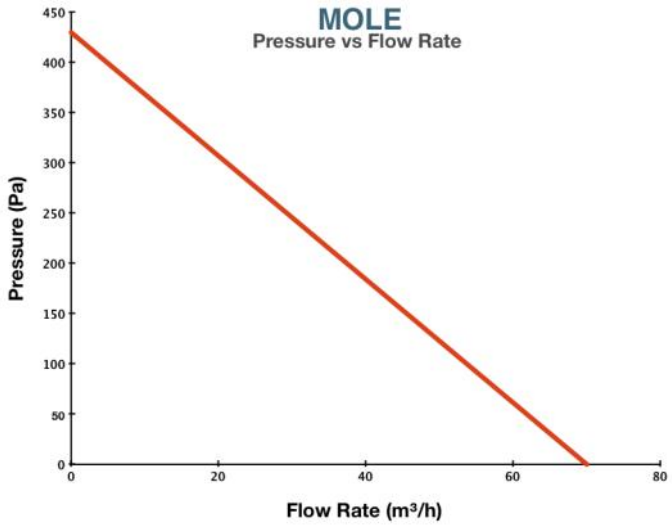
There are two versions of the MOLE fan, one for installing on walls and the other for ceiling installation. Both of these are of slim design so are unobtrusive, and are designed to extract air through a 90° ducting connection and through rectangular ducting making them an ideal choice for connecting to ducting running under floorboards or above ceiling panels.
Operation of the MOLE fan is fully automatic - the fan will operate when bathroom light is switched on. There are no user adjustments required. A single gang remote proportional timer transformer is included as standard, and a remote AUTOSTAT humidity controller is available as an optional extra.

Features and Benefits:

- 90° exhaust spigot for connecting to connecting to ducting running under floorboards or above ceiling panels.
- Shipped as standard with a rectangular spigot which is ideal for space saving or installations where space is limited. A circular ducting adapter available.
- The MOLE operates when the light switch is turned on and is programmed for proportional timer control so is energy efficient and does not run unnecessarily
- Produces up to 70m³/h of air flow thereby conforming to building regulations part F
- Incorporates Maglev DC fan motors - designed to operate for 50,000+ hours fault free which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling)
- Optional RHL AUTOSTAT humidity controller which continually monitors ambient humidity and automatically adjusts the control level accordingly
- 5 year guarantee giving peace of mind

ECO FRIENDLY

MOLE uses only **8 WATTS** of electricity



Performance:

MOLE Bathroom Fan: 70m³/h 8W 430PA 30dB

Item	Part No.	Kit Contents
Mole bathroom fan (wall)	**MOLE**	Fan with customised rectangular adaptor (110X60mm)
Mole bathroom fan (ceiling)	**MOLE C**	Fan with customised rectangular adaptor (110X60mm)
AUTOSTAT IV (optional)	**AUTOSTAT IV 12V**	12V remote AUTOSTAT VI smart humidity controller

MIXVENT INLINE high volume medium pressure fan

RHL MIXVENT INLINE is a commercial strength inline high pressure extractor fan for ducting systems and conditions of high air flow resistance.

All MIXVENT INLINE fans include the combination of a powerful motor factory matched to a mixed flow impeller. This motor and impeller combination enables the MIXVENT INLINE fans to deliver high airflow performances with the minimum of noise generation against high static pressures typically found in ducted ventilation systems.

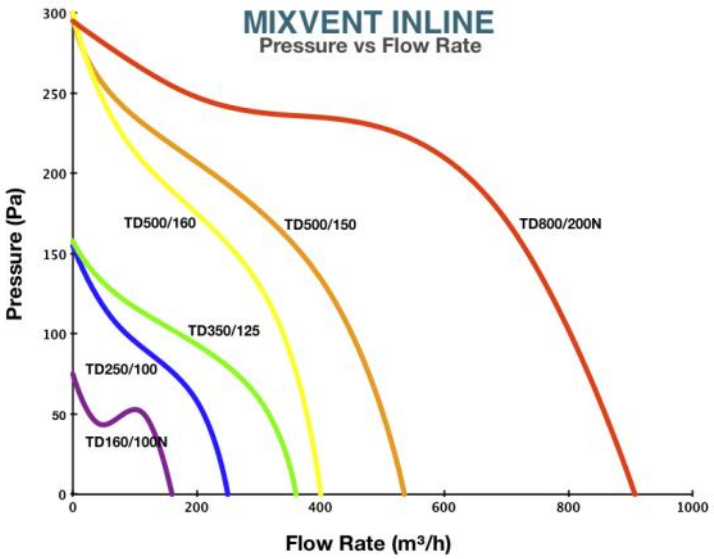
The unique design of the MIXVENT INLINE support brackets allows the motor and impeller assembly to be fitted or removed without dismantling the adjacent dusting and therefore facilitating any installation or maintenance.

The internal aerodynamic design enables the unit to generate large air volumes and pressures with the minimum of in-duct or radiated noise. An additional advantage of the MIXVENT INLINE fan is the fitment of directly connected two speed motors as standard - these motors are suitable for speed control regulation using electronic or auto-transformer controllers. The MIXVENT INLINE fan offers the ideal in-line duct fan solution for a wide range of HVAC ventilation applications.

The MIXVENT INLINE models are manufactured in tough reinforced plastic, except model 160 which has a metal casing and is finished in a tough epoxy-polyester paint coating. The fan duct connection flanges are manufactured from reinforced plastic, except for model 800 which is constructed from epoxy-polyester coated metal.

Performance:

MIXVENT TD 160/100N: 160m³/h 75Pa 18dB
MIXVENT TD 250/100: 250m³/h 155Pa 28dB
MIXVENT TD 350/125: 360m³/h 158Pa 30dB
MIXVENT TD 500/150: 535m³/h 300Pa 33dB
MIXVENT TD 500/160: 400m³/h 300Pa 41dB
MIXVENT TD 800/200N: 907m³/h 295Pa 41dB



Item	Part No.	Kit Contents
TD160/100N fan	**INLINETD160/100N**	MIXVENT INLINE TD160/100N 240V pressure fan, instructions
TD160/100N fan	**INLINETD250/100**	MIXVENT INLINE TD160/100N 240V pressure fan, instructions
TD160/100N fan	**INLINETD350/125**	MIXVENT INLINE TD160/100N 240V pressure fan, instructions
TD500/150 fan	**INLINETD500/150**	MIXVENT INLINE TD500/150 240V pressure fan, instructions
TD500/160 fan	**INLINETD500/160**	MIXVENT INLINE TD500/160 240V pressure fan, instructions
TD800/200 fan	**INLINETD800/200N**	MIXVENT INLINE TD800/200 240V pressure fan, instructions

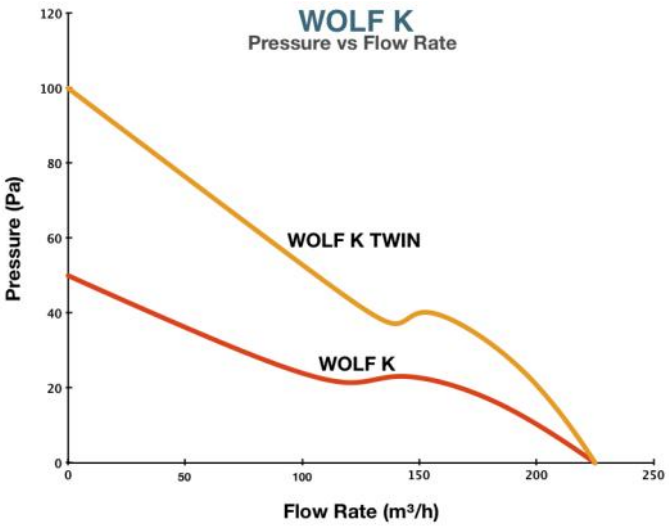
WOLF K & WOLF K TWIN kitchen fans

The low-watt WOLF K fan system is a powerful fully automatic kitchen fan. The fan is dual speed and utilises an energy efficient MagLev motor, offering great efficiency, quiet operation and exceptionally long life (up to 50,000 hours of operation).

This is a reliable fully automatic fan for effective humidity control. No user or installation set up is required. The fan can be operated at high speed extraction by switching to 'Manual'.

Features and Benefits:

- Incorporates MagLev technology which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling, window)
- A removable stainless steel filter, which is dish washer safe, protects the fan blades and shutters giving longer life
- Electromechanical automatic shutters operate silently and prevent drafts
- The internal Autostat (humidity controller) is perfectly in tune with normal living conditions and;
  - Responds to changes (and uniquely, small changes) in air humidity therefore requiring no manual adjustment to retain the air quality in your home
  - Incorporates a data-logger that captures humidity, temperature and fan operation providing details on the dwelling air quality for improved condensation control management
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing. Not only does this give you more choice in fan location but also a more effective ventilation system and removal of cooking moisture and odours
- The WOLF K has a built in LED indicator to show what mode the fan is in.
- Produces up to 225m³/h of air flow thereby conforming to building regulations part F
- Lifetime* guarantee on the MagLev motor and 5 year guarantee on all other parts giving peace of mind.



ECO FRIENDLY

WOLF K incorporates a **5 WATTS** motor.

Performance:

WOLF K: 225m³/h 5W 50Pa 30dB
WOLF K TWIN: 225m³/h 10W 100Pa 30dB

Item	Part No.	Kit Contents
Fan + kit for wall installation	**WOLF K - WALL**	Wall sleeve & external grille
Fan + kit for single & double glazed window installation	**WOLF K - P WINDOW**	Window fixing kit with external grille
Fan + kit for acrylic double glazed window installation	**WOLF K - DG ACR**	Designer base with screws for acrylic fixing
Fan, dual inline impellor and motors	**WOLF K-TWIN**	High pressure fan for ducting

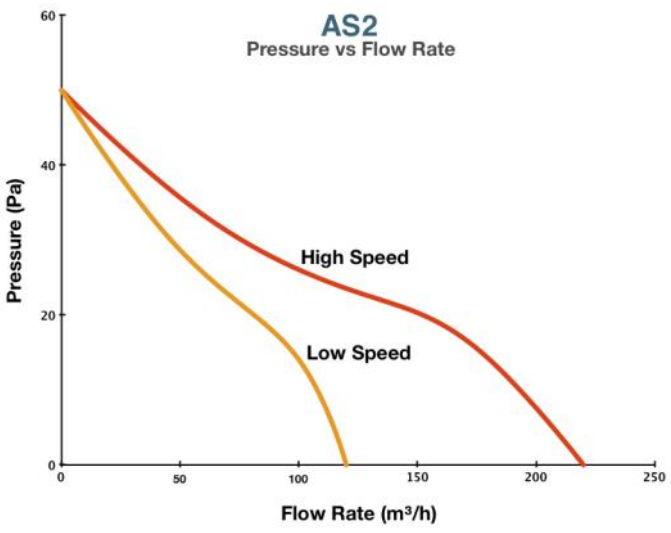
AS2 kitchen fan

AS2 is a stylish yet robust 240V fan designed for effective humidity control operation within kitchen environments. All AS2 kits include a remote AUTOSTAT smart humidity controller which can be placed away from the fan. This fan is particularly useful when it is important for the humidity sensor to be located away from the fan for optimal humidity control.

AS2 is supplied in a kit form for either wall, window or double glazing installation (150mm/6 inch back spigot). The AS2 includes a removable stainless steel grease filter that can be easily removed for cleaning and is dishwasher proof.

Features and Benefits:

- The remote AUTOSTAT humidity controller allows for optimum positioning of the fan yet monitors kitchen humidity levels close to their source around the clock. There are no user adjustments to the AUTOSTAT.
- The remote AUTOSTAT (humidity controller) is perfectly in tune with normal living conditions and;
  - Responds to changes (and uniquely, small changes) in air humidity therefore requiring no manual adjustment to retain the air quality in your home
  - Incorporates a data-logger that captures humidity, temperature and fan operation providing details on the dwelling air quality for improved condensation control management
- A removable stainless steel filter, which is dish washer safe, protects the fan blades and shutters giving longer life
- Electromechanical automatic shutters operate silently and prevent drafts
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing. Not only does this give you more choice in fan location but also a more effective ventilation system and removal of cooking moisture and odours
- Produces in excess of 225m³/h (when installed in accordance with the correct installation instructions) of air flow thereby conforming to building regulations part F
- 5 year guarantee giving peace of mind



AS2 has a recyclable housing and benefits from the RHL AUTOSTAT technology.

Performance:

AS2: 120-220m³/h 22W 50Pa 18-30dB

Item	Part No.	Kit Contents
AS2 fan	**AS2 FAN**	AS2 fan only
AS2 + AUTOSTAT IV + wall kit	**AS2 KIT**	AS2 fan, AUTOSTAT IV, external grille, mounting kit
AS2 + AUTOSTAT IV + window kit	**AS2 P KIT**	AS2 fan, AUTOSTAT IV, window mounting kit
AS2 + AUTOSTAT IV + double glazing kit	**AS2 DG**	AS2 fan, AUTOSTAT IV, RHL double glazed panel mounting kit

DOLPHIN kitchen fan

The DOLPHIN Kitchen fan is a powerful entry level fan suitable for everyday use in busy domestic kitchen environments. It has a high temperature resistant case with a stainless steel filter that can be removed and placed in the dishwasher. As with all RHL products it offers best value for reduced noise level and long life.

The fan is operated by pull cord which offers complete, instant and simple control.

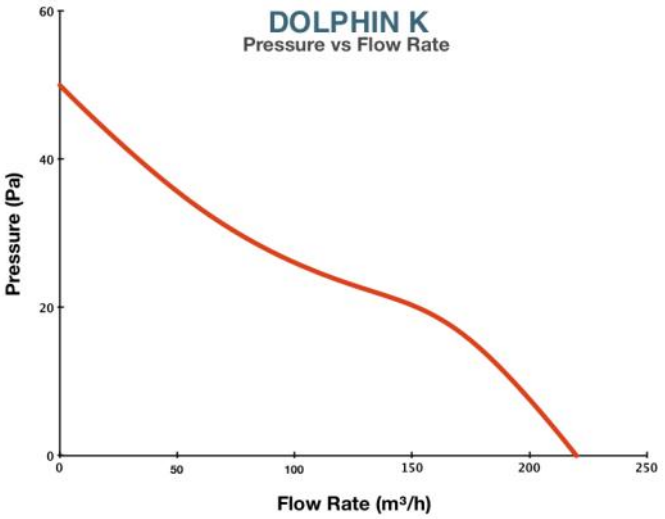
This DOLPHIN is supplied as a simple fan unit with fitting options available depending upon the installation requirements.

Features and Benefits:

- Incorporates a brushless motor which means:
  - Quiet operation
  - Cost effective as it is relatively inexpensive to run, low maintenance and has a long life.
- Can be fixed in any orientation without affecting performance (wall, ceiling, window)
- A removable stainless steel filter, which is dish washer safe, protects the fan blades and shutters giving longer life
- Quiet electromechanical automatic shutters operate silently and prevent drafts
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing. Not only does this give you more choice in fan location but also a more effective ventilation system and removal of cooking moisture and odours
- The DOLPHIN has a built in power on indicator to show what mode the fan is in.
- Produces up to 235m³/h of air flow thereby conforming to building regulations part F
- 2 year guarantee giving peace of mind

ECO FRIENDLY

DOLPHIN complies with the WEEE directive



Performance:

DOLPHIN: 225m³/h 20W 50Pa 35dB

Item	Part No.	Kit Contents
DOLPHIN	**DOLPHIN K**	DOLPHIN 230V fan
DOLPHIN wall kit	**150mm wall kit**	Telescopic wall sleeve and brown external grille
DOLPHIN window kit	**150mm window kit**	Off-white external grille with single/double glazing fixing kit

HUSKY internal ducted kitchen fan

The single room ventilation HUSKY fan is engineered to be durable, efficient, quiet and easy to maintain. It is designed for internal ducted applications or where 100/150mm ducting is available.

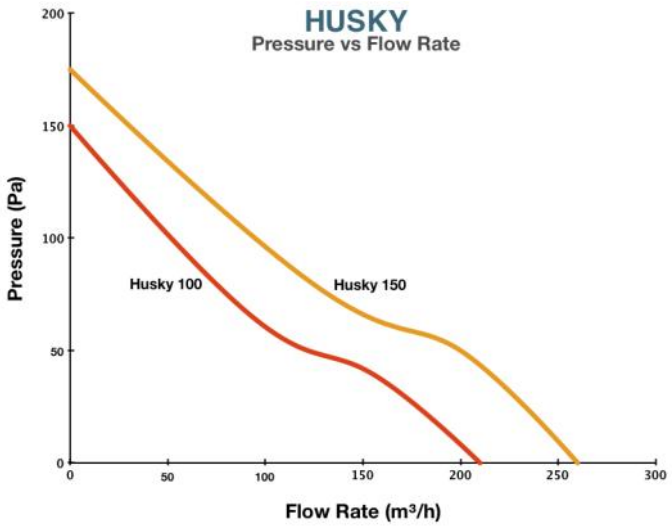
HUSKY is powered by energy efficient Maglev brushless DC motors offering great efficiency, quiet operation and exceptionally long life (up to 50,000 hours of operation). The vibration absorbing and sound deadened chassis is made of robust polycarbonate/ABS polymer. The integral Autostat provides for automatic humidity control. No user or installation set up is required.

ECO FRIENDLY

HUSKY incorporates 3 x **2 WATT MagLev** motors.

Features and Benefits:

- The Husky100A has a built in Autostat humidity controller with pull cord override and LED indicator to show what mode the fan is in.
- Incorporates MagLev technology which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling, window)
- A removable stainless steel filter, which is dish washer safe, protects the fan blades and shutters giving longer life
- The internal Autostat (humidity controller) is perfectly in tune with normal living conditions and;
  - Responds to changes (and uniquely, small changes) in air humidity therefore requiring no manual adjustment to retain the air quality in your home
  - Incorporates a data-logger that captures humidity, temperature and fan operation providing details on the dwelling air quality for improved condensation control management
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing. Not only does this give you more choice in fan location but also a more effective ventilation system and removal of cooking moisture and odours
- Produces up to 260m³/h (Husky-150)of air flow thereby conforming to building regulations part F



Performance:

HUSKY 100: 210m³/h 8W 150Pa 36dB
HUSKY 150: 260m³/h 8W 175Pa 34dB

Item	Part No.	Kit Contents
HUSKY fan with 100mm spigot	**HUSKY-100**	Husky 100 fan with 4" spigot, Autostat IV, int. transformer
HUSKY fan with 150mm spigot	**HUSKY-150**	Husky 150 fan with 6" spigot, Autostat IV, int. transformer
HUSKY fan with 100mm spigot and AUTOSTAT	**HUSKY-100A**	Husky 100 fan with 6" spigot, internal Autostat IV and transformer
HUSKY fan with 150mm spigot and AUTOSTAT	**HUSKY-150A**	Husky 150 fan with 6" spigot, internal Autostat IV and transformer

MULTI-ROOM kitchen, bathroom and WC fan

The MULTI-ROOM EXTRACTOR (MRE) is a centrally located integral extractor fan for continuous extraction from the high humidity areas of a dwelling. It is an optimal solution where a discrete and integrated ventilation system is required. The main unit can be located in the attic or in a central cupboard and is connected via a ducting system to each room. This provides an unobtrusive ventilation solution as there is only a grille visible in each room without the need for multiple extractor fans located around the dwelling.

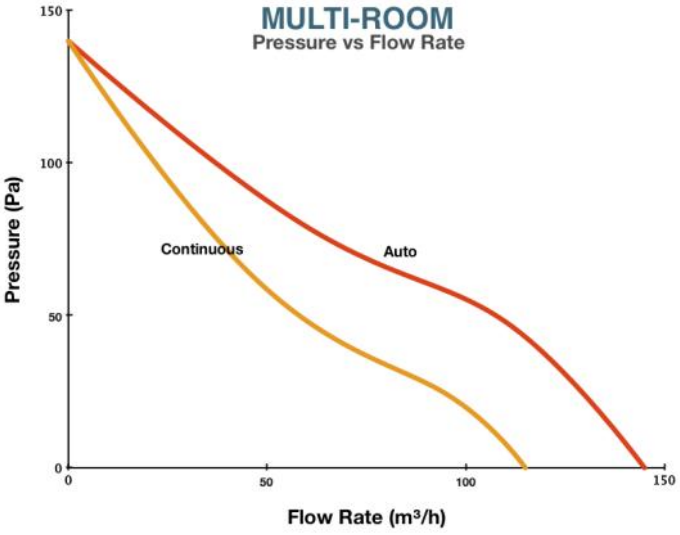
Additional benefits are that there is only one exhaust point to the exterior but multiple rooms are extracted from; as it is a single unit it is more efficient and the maintenance and running costs are minimised.

MULTI-ROOM EXTRACTOR fan incorporates 3X **5 WATT MagLev** motor.

Incorporating the RHL AUTOSTAT, it provides quiet ventilation which seamlessly responds to everyday living. The continuous extraction ensures that contaminated air is removed and replaced by fresh air and should be used in conjunction with RHL Vapour Vents. The fans are dual speed and utilise energy efficient MagLev motors, offering great efficiency, quiet operation and exceptionally long life (up to 50,000 hours of operation). This is a reliable fully automatic and effective ventilation system. No user intervention or installation set up is required.

Features and Benefits:

- Single centralised unit connected to a ducting system and extracting from multiple rooms offering the following benefits:
  - It is discrete
  - Replaces the requirement for multiple fans so there are minimum mechanical parts giving low maintenance and low running costs
  - Controlled by the RHL AUTOSTAT so no user intervention is required to maintain a pleasant balanced living environment. And it is energy efficient only using high speed when required.
- Incorporates MagLev technology which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
- Air is dynamically drawn across the internal AUTOSTAT (humidity controller) which is perfectly in tune with normal living conditions and;
  - Responds to changes (and uniquely, small changes) in air humidity therefore requiring no manual adjustment to retain the air quality in your home
  - Incorporates a data-logger that captures humidity, temperature and fan operation



Performance:

MRE: 140m³/h 15W 150Pa 30dB

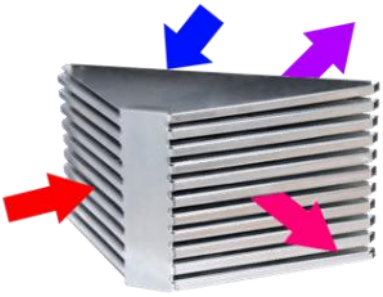
Item	Part No.	Kit Contents
MRE unit only	**MRE**	MRE unit inclusive of internal AUTOSTAT
Ducting kit	**MRE-DUCT**	Kitchen (125mm), bathroom (100mm) and WC (100mm) grilles, 2x 3m 125mm duct, 3 x125mm 90^0 bends, 2 x125mm to 100mm adapters, 125mm inline connect-or, 1x 3m100mm flexible ducting. (additional items available from Accessories list)
Vapour vent 150mm with high level push through grille	**V150P**	150mm diameter tube, internal vapour membrane, push through circular external grille with seal, internal grille

POLAR heat recovery ventilation

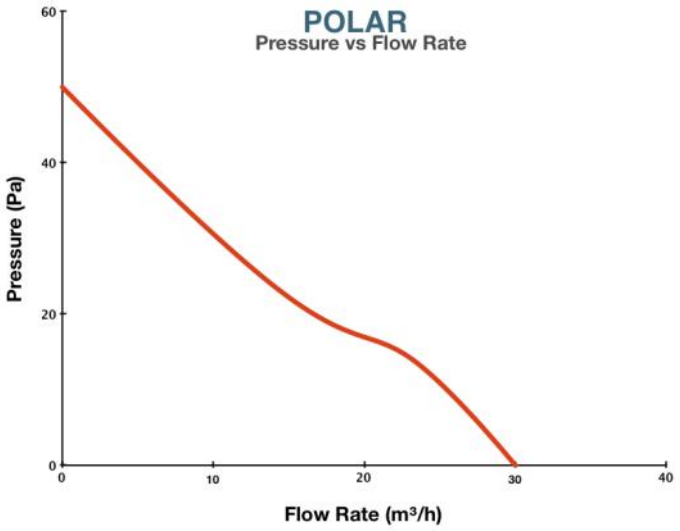
The POLAR HRV (Heat Recovery Ventilation) fan ventilates the interior of the building whilst retaining heat thereby conserving energy and minimising cost. The fan features an aluminium heat exchanger core so that when the interior of the building is comparatively warmer than the exterior, the core transfers heat from the outgoing stale air to preheat the incoming fresh air. The extent to which the heat exchange occurs depends upon the relative difference in air temperature. The maximum heat exchange possible (and across the industry) is around 75%, although under normal environmental conditions around 50% heat recovery is more realistic.

The design is such that the cross-current sections inside the fan ensure the two air streams are always kept separate preventing the incoming fresh air from being contaminated by the outgoing stale air. The POLAR HRV runs continuously and together with the integrated filters helps to maintain a comfortable living environment as when the incoming air is heated it reduces the air contaminants such as nitrous oxide, carbon dioxide and water vapour within it and replenishes the oxygen levels. No user or installation set up is required.

Features and Benefits:



- Ventilates the interior of the building whilst retaining heat thereby conserving energy and minimising cost
- Continuous running maintains a comfortable and healthy fresh air environment
- As the air is filtered and removes contaminants it is of particular benefit to those with asthma or other allergies
- Aluminium super conductive heat recovery plates deliver high efficiency and very long life
- Manufactured to WEEE requirements
- Incorporates MagLev DC fan motors - designed to operate for 50,000+ hours fault free which means:
  - Almost silent operation
  - Cost effective as it is inexpensive to run, low maintenance and has a long life.
  - Can be fixed in any orientation without affecting performance (wall, ceiling)
  - High performance low wattage energy efficient solution for ducted systems
- Polycarbonate ABS mix with fire retardant housing which provides a robust and high temperature resistant casing.
- Produces up to 30m³/h of air flow



Performance:

POLAR HRV: 30m³/h 4W 50Pa 30dB

Item	Part No.	Kit Contents
HRV FAN	**POLAR HRV**	POLAR HRV fan with heat recovery ventilation
HRV split duct	**HRV100DUCT**	100mm intake/extract sleeve
HRV external grille (brown)	**HRV100GRILLE**	Intake/Extract 100mm Grille
HRV flat roof cowl	**HRV100ROOF-F**	100mm ducted roof cowl with flashing for flat roof
HRV sloped roof cowl	**HRV100ROOF-S**	100mm ducted roof cowl with flashing for sloped roof

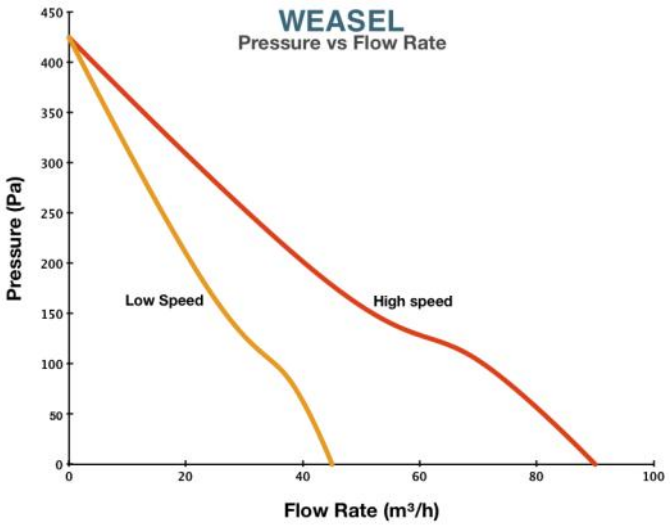
WEASEL WINDOW FRAME FAN for kitchen and bathroom

Part of the RHL Heritage range of ventilation products, the WINDOW FRAME FAN (WEASEL) is of slim design, fits onto the window head and extracts through the window vent so is discrete, unobtrusive and secure. It is an ideal solution where no external appearance of a fan or grille is allowed and can be used in new buildings or retro fitted . The WEASEL fan continuously extracts quietly, removing humidity and stale air from the whole house and in particular from bathrooms and kitchens.

It is recommended as a safe solution for the installation of window fans in high rise living accommodation or "difficult to reach" places, as it does not require there to be external access for the initial fan installation or maintenance and all works are carried out from the interior of the building. The fan incorporates a powerful 8 watt brushless long life energy efficient motor which is specifically designed for continuous extract. The operation of the fan is fully automatic and no user adjustment is required. A remote AUTOSTAT with pull cord override is available as an additional option. The WEASEL is available as standard as a 240V fan with the option of a 12V remote transformer for use in bathrooms and wet rooms. When installed in the bathroom and kitchen it provides a comprehensive whole house ventilation solution and offers the optimal extraction for the dwelling whilst conforming to Building Regulation Part F1.

Features and Benefits:

- The WEASEL is slim line design and fits onto the window header adjacent to the horizontal window reveal, The fascia body of the fan overlaps the passive vent port so provides a discrete and unobtrusive solution.
- The WEASEL is suitable for installation both in the kitchen and bathroom simplifying the complete installation and maintenance process
- The fan is fitted from the inside making this a safe solution for high rise or difficult to reach installations
- As the fan is not integrated into the window but positioned and attached onto the window head, it can simply be unscrewed and replaced
- As a continuous extract system it improves the dynamic insulation properties of the building saving on the carbon footprint
- There is no opportunity for an intruder to remove the fan and lean through to undo the window catch.
- For builders, the building can be completed and the fans installed by the electrician at a later date
- The remote AUTOSTAT (humidity controller) is perfectly in tune with normal living conditions and;
  - Responds to changes (and uniquely, small changes) in air humidity requiring no manual adjustment to retain the air quality in your home
  - Incorporates a data-logger that captures humidity, temperature and fan operation providing details on the dwelling air quality for improved condensation control management
  - A remote 12V SELV transformer is included as standard in the WEASELB (the preferred option for wet environments).

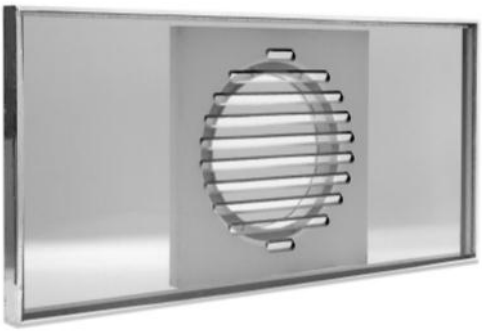


Performance:

WEASEL: 90/45m³/h 8W 425Pa 35/28dB

Item	Part No.	Kit Contents
Window frame fan	**WEASEL**	Slim Line Fan with window frame fixings
Window frame fan 12V	**WEASEL 12**	Slim Line Fan with window frame fixings, remote 12V transformer
Autostat 240V	**AUTOSTAT IV 240V**	240V Autostat IV humidity controller
Autostat 12V	**AUTOSTAT IV 12V**	12V Autostat IV humidity controller
Hi-rise anti-draft cowl	**VENT COWL HR**	External vent cowl

RHL DOUBLE GLAZED PANEL



RHL WINDOW PANELS provide an elegant and secure solution for window mounted extraction fans and are an ideal solution for conservation/heritage areas where no external appearance of a fan or grille is permitted. These panels are available with either 100mm apertures for bathrooms or 150mm apertures for kitchens.

They are also recommended as a safe solution for the installation of window fans in high rise living accommodation or “difficult to reach” places, as they do not require there to be external access for the initial fan installation or maintenance as all works are carried out from the interior of the building.

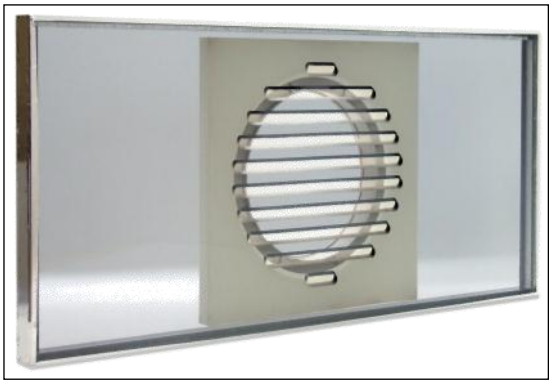
As an alternative to “normal” window fan installations, the HERITAGE WINDOW PANELS offer a secure solution as the fan is installed behind the external glazing panel and does not allow access from outside**.**

Features and Benefits:

- Fans are fitted from the inside making this a safe solution for high rise or difficult to reach installations
- As the fan is not integrated into the window but positioned and attached inside the window, it can simply be unscrewed and replaced
- There is no opportunity for an intruder to remove the fan and lean through to undo the window catch.
- For builders, the building can be completed and the fans installed by the electrician at a later date
- Supplied as a sealed unit with integrated aperture and louvers for ease of installation.
- An integrated clear acrylic baffle is available for high level (above 6 floors) and exposed locations to significantly reduce draft
- The external panel is manufactured in a translucent finish to match the appearance of the glass and is supplied in smoked acrylic, Cotswold (frosted) acrylic and glass hybrid configurations enabling a close match to the buildings existing windows.
- The Pilkington K Glass /acrylic hybrid model is suitable for high level properties which require reinforced safety glass
- Together the Pilkington K glass and acrylic panels make the double glazed panels more heat efficient meaning that not only does it save energy but addresses those organisations who have a CO_2 agenda
- In some installations these panels have been used without the fan for passive ventilation.
- Conforms to the same specifications requirements as glass windows: BS 6375 part one and BS 6399 part two, Exposure Category "B"
- Standard panel dimensions are up to 1.2m length and width. However larger or different shaped panels can be custom designed, manufactured and tested subject to specific requirements offering a wide range of versatile installation options
- UV resistant for longer life
- 10 year guarantee giving peace of mind

Item	Part No.
Panel for 100mm fans	**DDG-100-DUBLE**
Panel for 150mm fans	**DDG-150-DUBLE**
Panel baffle (for units above 5th floor)	**DDG-BAFFLE**

BESPOKE LASER PRECISION CUT FAN ACCESSORIES



RHL offer a wide range of laser precision cut ventilation accessories, from acrylic baffles to complete double glazed panels designed, developed and fully manufactured by our dedicated team of experts, using state of the art laser precision tooling.

Our bespoke laser precision cut accessories are designed and manufactured with durability, practicality and aesthetic appearance in mind. They all benefit from the competence in development and many years of ventilation product experience of RHL.

DOUBLE GLAZED PANELS

RHL DOUBLE GLAZED PANELS are the result of many years of design and development. Their advanced and durable construction ensure ease of installation, quiet fan operation and permanent fixed installation. All these features makes them perfect solution for conservation/ heritage areas where no external appearance of fan or grill is permitted.

All RHL DOUBLE GLAZED PANELS are custom made to strict customer specifications, and are backed with 10-year warranty. They are available in smoked acrylic, Cotswold (frosted) acrylic and glass hybrid configurations.

Our standard advanced design allows for panel dimensions up to 1.2m length and width. Larger panels can be custom designed, manufactured and tested subject to specific requirements.

BAFFLES / HIGH RISE BAFFLES

Precision cut to exact customer specifications. High Rise Baffle is specifically designed for ventilation applications above fifth floor to significantly reduce draughts, from both horizontal and vertical high level winds.

For further details, including pricing, please contact our sales office on **0845 124 6066**.

Power Supply			
12v 10va Transformer Auto Timer	Trans 10AT		
12v 10va Transformer	Trans10		
	Order Ref 100	**Order Ref 125**	**Order Ref 150**
External Air Outlets	**100mm Spigot**	**125mm Spigot**	**150mm Spigot**
Brown Cowl	Cowl 100B	Cowl 125B	Cowl 150B
White Cowl	Cowl 100W	Cowl 125W	Cowl 150W
Beige Cowl	Cowl 100Be	Cowl 125Be	Cowl 150Be
Baffle for Window fans	Baffle100	Baffle125	Baffle150
Window Fan Kit 100	Fan Window kit 100	Fan Window kit 125	Fan Window kit 150
Brown Grille	Grille 100B	Grille 125B	Grille 150B
Beige Grille	Cowl 100Be	Cowl 125Be	Cowl 150Be
Terracotta Grille	Cowl 100T	Cowl 125T	Cowl 150T
White Grille	Cowl 100W	Cowl 125W	Cowl 150W
Push Through sleeve & grille	Push Thro 100	Push Thro 125	Push Thro 150
Air Duct Parts			
Equal "T" Piece	Equal T 100	Equal T	Equal T
45° Bend	Bend 45° 100	Bend 45°	Bend 45°
90° Bend	Bend 90° 100	Bend 90°	Bend 90°
Straight Pipe Connector	Pipe connector 100	Pipe connector	Pipe connector
Pipe Fastener	Pipe Fastener 100	Pipe Fastener	Pipe Fastener
Semi-Rigid Aluminium Ducting, 1m long	Semi Regid Duct 100 Al x 1m	Semi Regid Duct 125 Al x 1m	Semi Regid Duct 150 Al x 1m
Flexible Aluminium Ducting, 1m long	Flexible Duct 100 Al x 1m	Flexible Duct 125 Al x 1m	Flexible Duct 150 Al x 1m
Telescopic Tube	Wall sleeve Tele-scopic 100	Wall sleeve Tele-scopic 125	Wall sleeve Tele-scopic 150
Rigid Plastic Ducting, 1m long	Plastic 100 Duct 1m	Plastic 125 Duct 1m	Plastic 150 Duct 1m
Roof Air Outlets			
Roof Vent, 160mm connection, Angles or Flat weathering slate			Roof Vent 160
Roof Vent, 110mm connection, Angles or Flat weathering slate	Roof Vent 110		

Internal Round Air Inlets		
Grille Round White 150mm	Round150	
Grille Round White 200mm	Round200	
Grille Round White 250mm	Round250	
Grille Round White 315mm	Round315	
Rectangular Plastic Duct	**Rectangular Duct 110x54mm**	**Rectangular Duct 204 x 60mm**
Duct 1m	D110	D204
Flexible bend	F110	F204
Elbow to 100mm round	E/100	E204/100
Bend 45° Horizontal	B45H	B204/45H
Adaptor offset to 100mm	AO100	AO204/100
Bend 90° Vertical	B90V	B204/90V
Bend 90° Horizontal	B90H	B204/90H
Connector	Con	Con204
Channel Clip	Clip	Clip204
Adaptor to 100mm	A100	A204/100

Pair Grille c/w Stainless Steel Grease Filter for Husky type Kitchen Fans	63204-10007
Grille Assembly c/w Stainless Steel Grease Filter for AS2, Wolf K, Dolphin K and Dryvent K	63204-10008
Pack of 10 Foam Filters for Otter, Badger, Dryvent B and Husky Bathroom Fans	Filter (10)
Replacement Front Cover for AS2, Wolf K, Dolphin K and Dryvent K	81203-10036
Replacement Front Cover for Otter, Badger, Dryvent B and Husky Fans	81203-10049

Basis for humidity controller remote from fan

- Humidity is temperature related - all temperature variations effect relative humidity (relative humidity meaning relative to water saturation of air at differing temperatures);
- Fundamental laws of physics require that vapour at high pressure will migrate to areas of low vapour pressure that is to cooler areas and cold surfaces.

Controller positioning requirements

- on an internal wall if possible (ideal position);
- adjacent to moisture source or between moisture source and external doorway;
- in large room, site close to moisture source;
- top edge to be 50 - 100mm down from the ceiling;
- clear of corners;
- clear of any protrusions, cupboards etc;
- not within 1000mm of a radiator;
- clear of external opening (not above doors).

The above are the requirements to detect moisture production as it is produced. Humidity controllers within fans are unable to meet all of the above criteria.

Remote Autostat advantages

- Fixing on an internal wall at high level provides for optimum position to monitor and control internal humidity conditions
- Able to position at best vantage point to detect new air bourn moisture
- Interference from external humidity and temperature are limited
- Data log function – valid (temperature & humidity)

Notes on fans that contain humidity controllers

- Fans situated on external walls or windows are usually on the cooler surface within the room, thereby attracting water vapour, as the air is cooler. Consequently, a higher than ambient humidity reading occurs;
- Humidity stays higher for excess periods causing energy loss and a nuisance to tenant;
- External air causes interference with reading;
- Integral nature of sensor remote from moisture source – moisture migrates to cooler areas of dwelling before detection occurs, often when detected the operation of a fan is too late to control moisture already migrated to cooler areas such as bedrooms.

The above represent some of the reasons for not using a sensor at the same location as the fan.

Furthermore, integral humidity controller can increase the nuisance factor to the householder, who often correctly suspects the automatic operation of the fan does not follow logically to moisture production. This has given rise to occupants finding ways to switch the fans off, usually never to be turned back on again making the installation of the fan system pointless and a waist of municipal resources. Some fan manufacturers have introduced monitoring systems to overcome the tenants turning the fans off and offering a legal remedy (or get out) to condensation/mould growth cases.

A correctly specified system does not need a monitoring system, as the fan will operate at sensible times in line with user expectation providing a worthwhile capital expenditure.

Humidity Control with absolute Humidity ‘g/M^3 water in air as a basis (temperature independent) with automatic allowance for ambient humidity over time should be the basis of intelligent humidity controllers, the RHL Autostat being a principle example.

Building Regulations - Part F: The Means of Ventilation

The purpose of the regulation is to ensure 'adequate means of ventilation is provided for people in the building'. According to the document, ventilation is the 'removal of 'stale' air from a building and replacement with 'fresh' outside air.'

This particular document gives a general overview of the current regulations with an outline for ways in which these regulations can be met.
Primary objective of induced ventilation is to condition air at a comfortable and safe level while protecting the fabric of the building. Building regulations for ventilation systems primarily provide for controlled humidity condition of air during the heating season.

Requirement:

F1.- There shall be adequate means of ventilation provided for people in the building.

Limits on Application:

Requirement F1 does not apply to a building or space within a building:
A.) into which people do not normally go; or
B.) which is used solely for storage; or
C.) which is a garage used solely in connection with a single dwelling

Guidelines on required Ventilation Rates

Part F, recommends air flow rates for various types of ventilation systems, as well as energy conservation and cost of supply and installation information.

Table 1.1a Extraction Ventilation Rates

Room	Min intermittent extract rate	Continuous extract rate	
		Min high rate	Min low rate
Kitchen	30 l/s, adjacent to hob, 60 l/s elsewhere	13 l/s	Total extract rate must be at least the whole building ventilation rate in Table 1.1b.
Utility room	30 l/s	8 l/s	
Bathroom	15 l/s	8 l/s	
Sanitary	6 l/s	6 l/s	N/A

Table 1.1b Whole Building Ventilation Rates

	Number of bedrooms in dwelling				
	1	2	3	4	5
Whole building ventilation rate [a,b] l/s	13	17	21	25	29

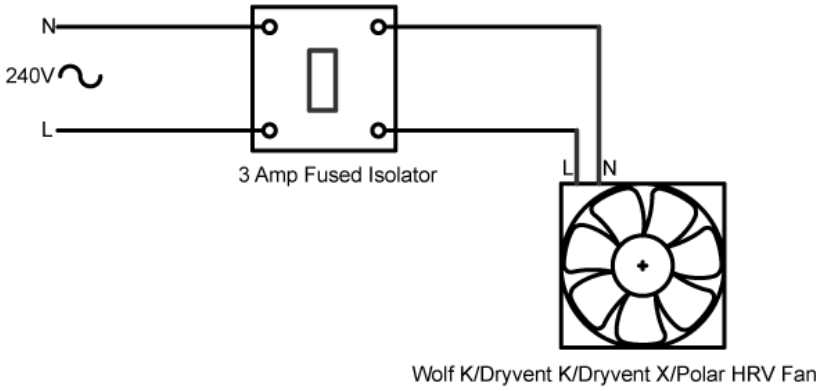
Notes:
a. In addition, the minimum ventilation rate should be not less than 0.2l/s per m^2 internal floor area (this includes each floor, e.g. For a two-storey building, add the ground and first floor areas).
b. This is based on two occupants in the main bedroom and a single occupant in all other bedrooms. This should be used as the default value. If greater level of occupancy is expected, then add 4l/s per occupant.

RHL Fan Feature Matrix

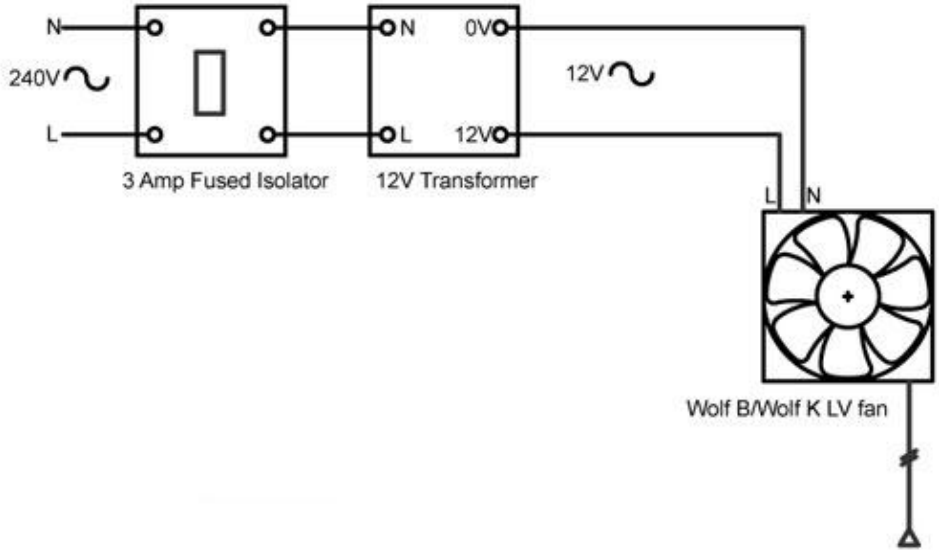
	KITCHEN FAN	BATHROOM FAN	INLINE FAN	SINGLE ROOM FAN	TWO ROOM FAN	INTUMESCENT FAN	VOLTAGE	HEIGHT mm	WIDTH mm	DEPTH mm	SPIGOT SIZE	REMOTE AUTOSTAT	INTEGRAL AUTOSTAT	AUTOSTAT DATA LOG	PULL CORD	TIMER OVERRUN	REMOTE TRANSFORMER	INTEGRAL TRANSFORMER	DUAL SPEED	FILTER	NOISE dB	FAN INPUT WATTS	MAX AIR FLOW m^3/h	STATIC PRESSURE PA
AS2	✓						240	218	226	49	146	✓		✓					✓		18-30	22	220	50
BADGER		✓			✓		12/240	210	350	125	100+68					✓				✓	28	6	110	120
DOLPHIN B		✓					12	166	166	30	100										35	5	85	40
DOLPHIN K	✓						240	218	226	49	146										35	20	225	50
DRYVENT B		✓					12	210	350	125	100										30	5.6	20-80	75
DRYVENT B FS		✓				✓	12	210	350	125	100-150										30	5.6	20-80	75
DRYVENT K	✓						240	218	226	49	100										30	5	50-225	50
DRYVENT X				✓			240	210	350	125	150										30	4	20	100
FOX FS						✓	12/240	210	350	49	100										28	4	85	120
HUSKY				✓			240	210	350	125	100-150		✓	✓	✓					✓	34-36	8	210-260	150-175
HUSKY FS				✓		✓	240	210	350	125	100-150								✓		29	16	140	435
MIXVENT INLINE TD160/100N			✓				240	165	232	138	98	Opt.		Opt.		Opt.			✓		14-18	35	160	75
MIXVENT INLINE TD250/100			✓				240	203	303	176	98	Opt.	Opt.	Opt.		Opt.			✓		23-28	39	250	155
MIXVENT INLINE TD350/125			✓				240	203	258	176	123	Opt.	Opt.	Opt.		Opt.			✓		26-30	56	360	158
MIXVENT INLINE TD500/150			✓				240	227	295	200	147	Opt.	Opt.	Opt.		Opt.					33	68	535	300
MIXVENT INLINE TD500/160			✓				240	227	275	200	157	Opt.	Opt.	Opt.		Opt.					41	50	400	300
MIXVENT INLINE TD800/200N			✓				240	250	302	217	198	Opt.	Opt.	Opt.		Opt.			✓		36-41	80	907	295
MOLE		✓		✓			12	166	166	30			✓	✓	✓	✓	✓			✓	30	8	70	430
MULTI-ROOM			✓				12/240														30	15	140	150
OTTER							12/240	210	350	125											28	4	85	120
OTTER FS				✓		✓	12/240	210	350	125						✓				✓	28	4	85	120
POLAR							12/240	210	350	125x2			✓	✓	Opt.	Opt.	Opt.	✓	✓	Opt.	30	4	30	50
SF12		✓					12	166	166	30											36	4	85	40
VAPOUR VENT																								
WEASEL												✓			✓						18-35	8	45-90	425
WOLF B		✓					12	166	166	30	100		✓				✓				36	4	85	40
WOLF B TWIN		✓					12	166	166	30	100		✓	✓	✓		✓				36	8	85	75
WOLF K	✓						240	218	226	49	146		✓	✓	✓				✓	✓	30	5	225	50
WOLF K TWIN	✓						240	218	226	49	146		✓	✓	✓				✓	✓	30	10	225	100

STEP 1	STEP 2	STEP 3	STEP 4
FAN USE	FAN LOCATION	AUTOSTAT LOCATION	RHL FAN MODEL
KITCHEN	WALL	INTEGRAL	HUSKY, WOLF K, WOLF K-TWIN
		REMOTE	AS2 K
		NO AUTOSTAT	AS2
	WINDOW	INTEGRAL	WOLF K
		REMOTE	AS2 P
		NO AUTOSTAT	AS2
BATHROOM	WALL	INTEGRAL	MOLE, DRYVENT B, WOLF B, WOLF B-TWIN
		REMOTE	SF12
		NO AUTOSTAT	SF12, OTTER
	WINDOW	INTEGRAL	WOLF B
		REMOTE	SF12 WINDOW KIT
		NO AUTOSTAT	SF12
SINGLE ROOM	WALL	INTEGRAL	HUSKY, POLAR
		NO AUTOSTAT	DRYVENT X
TWO ROOM	WALL	INTEGRAL	DRYVENT B
		NO AUTOSTAT	
INLINE	CONCEALED	OPTIONAL	MIXVENT INLINE

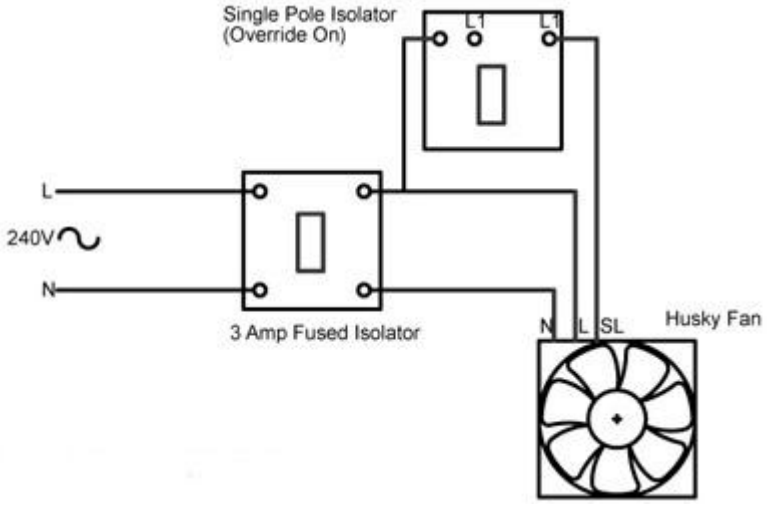
WIRING DIAGRAM A Applications: WOLF K, DRYVENT B & K, POLAR HRV



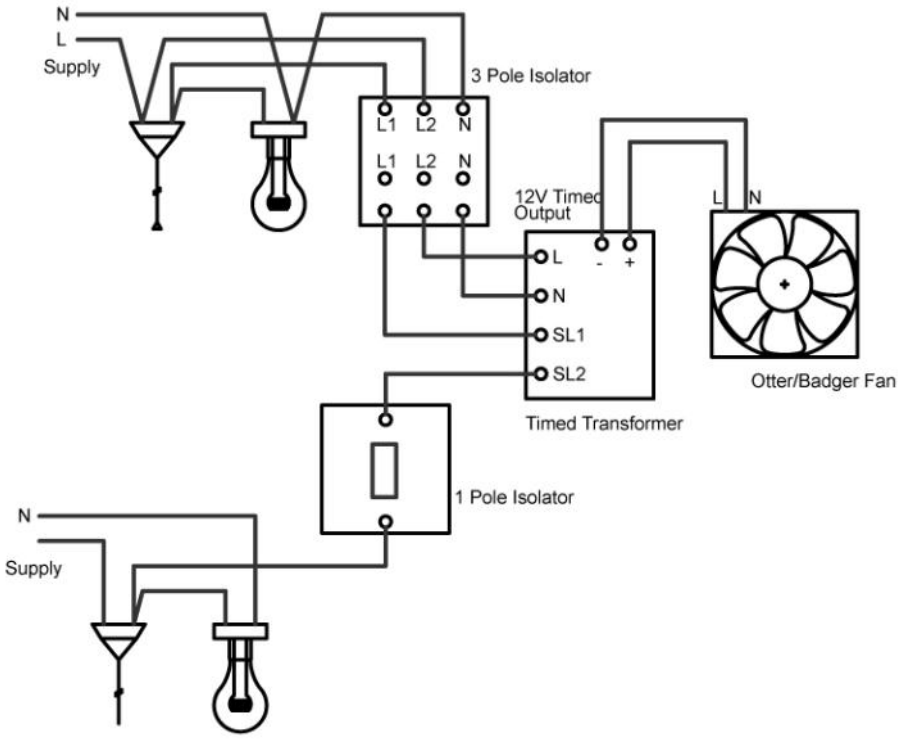
WIRING DIAGRAM B Applications: WOLF B



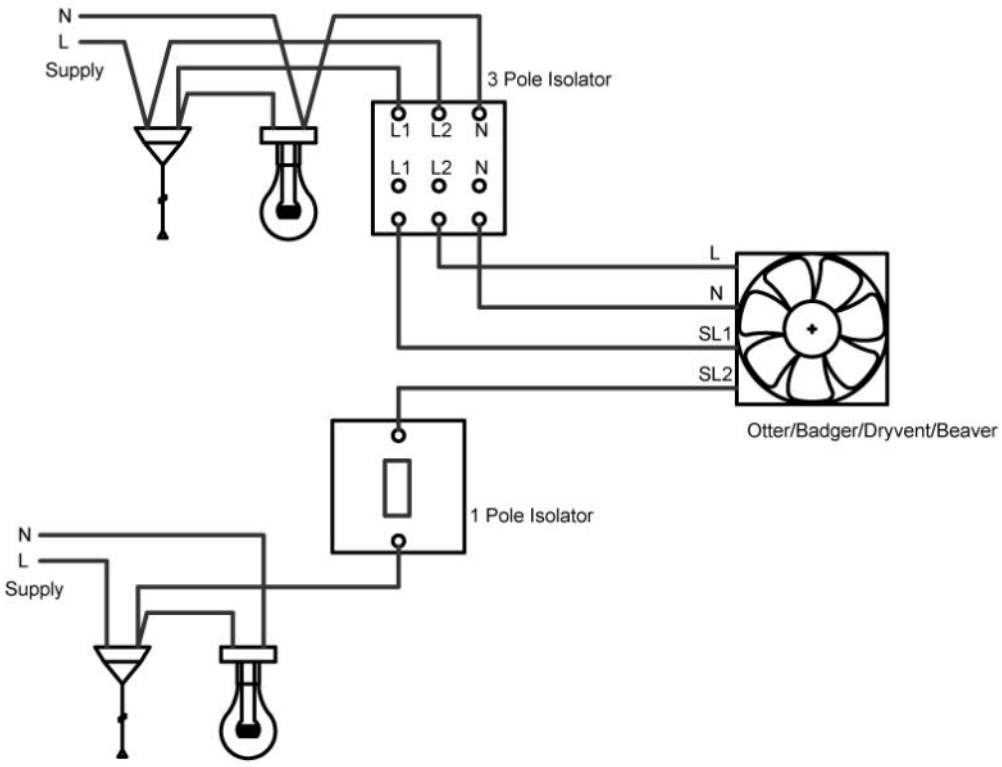
WIRING DIAGRAM C Applications: HUSKY



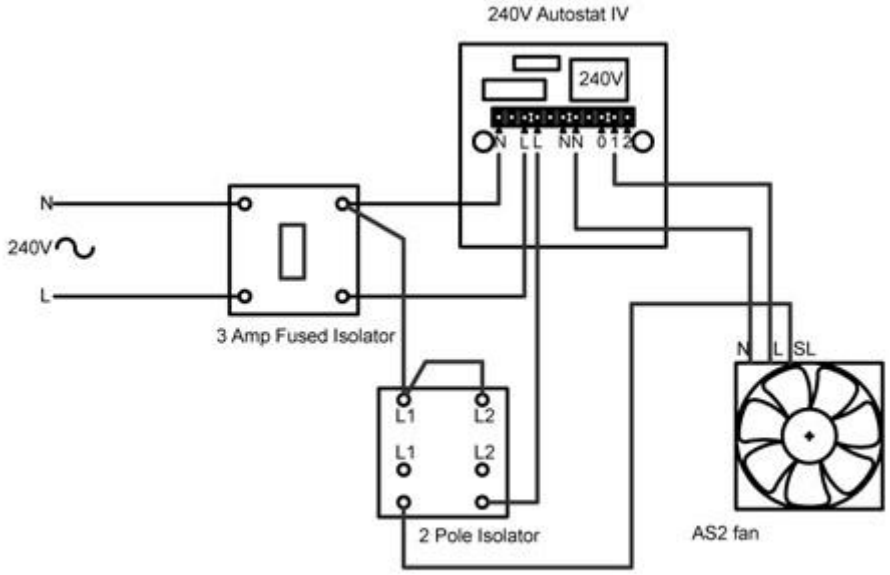
WIRING DIAGRAM D Applications: OTTER12V, BADGER 12V



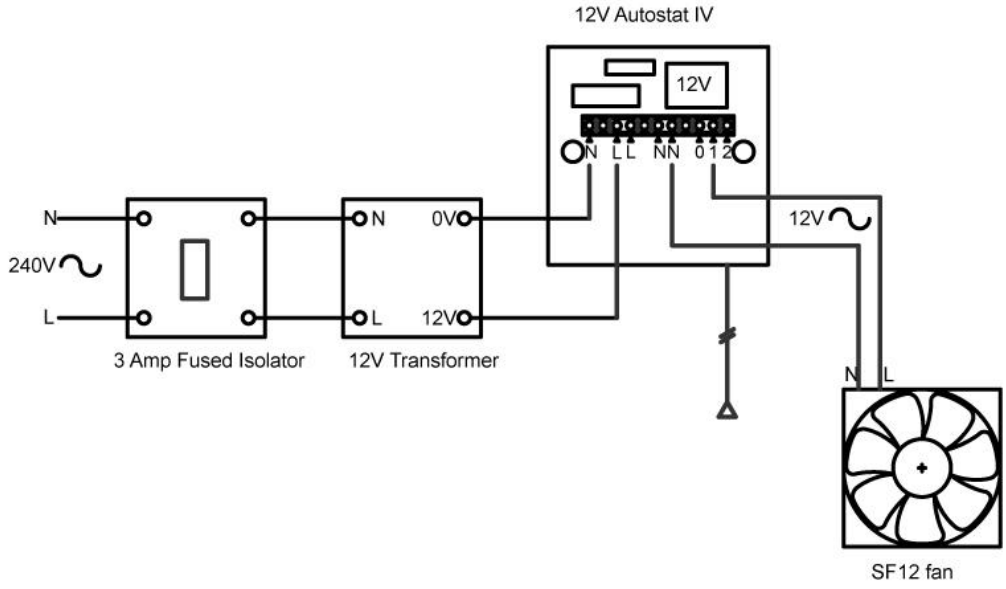
WIRING DIAGRAM E Applications: OTTER 230V, BADGER 230V, BEAVER, DRYVENT B



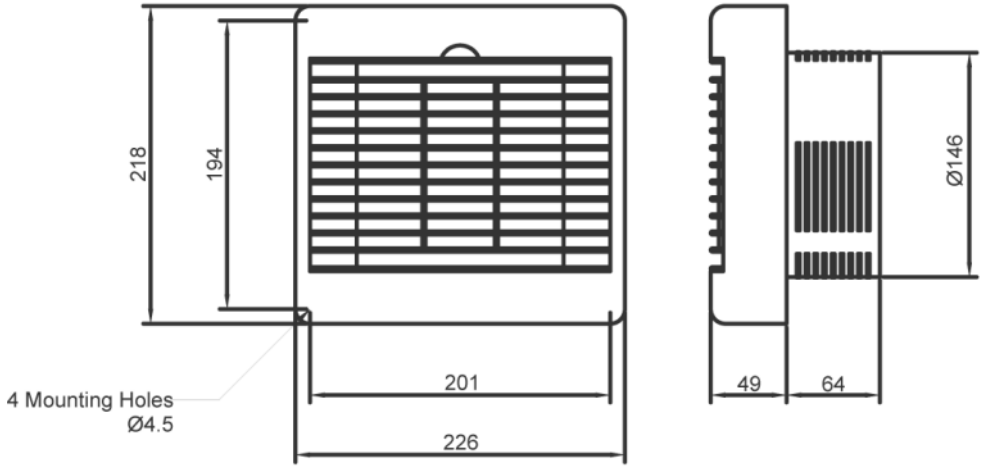
WIRING DIAGRAM F Applications: AS2 (remote AUTOSTAT control)



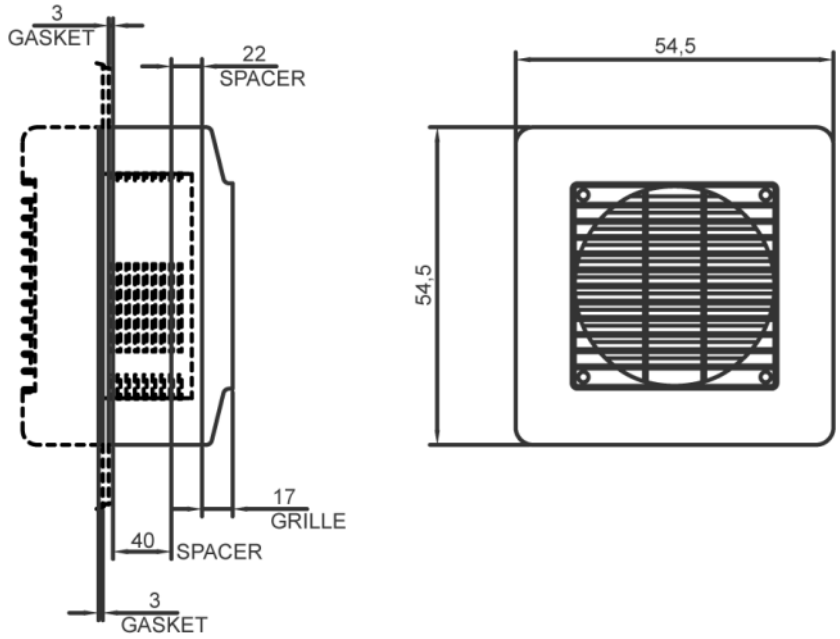
WIRING DIAGRAM G Applications: SF12



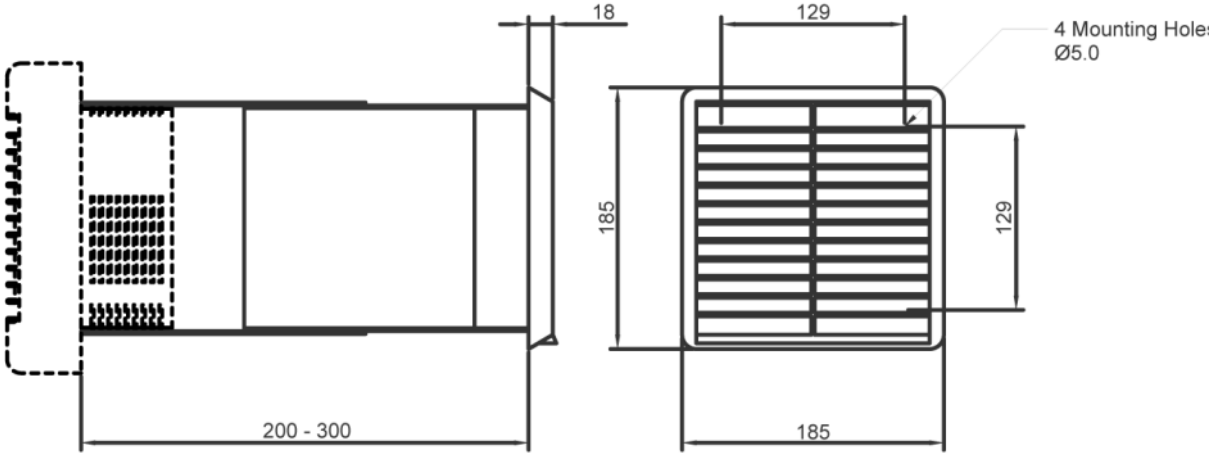
WOLF K, AS2, DRYVENT K



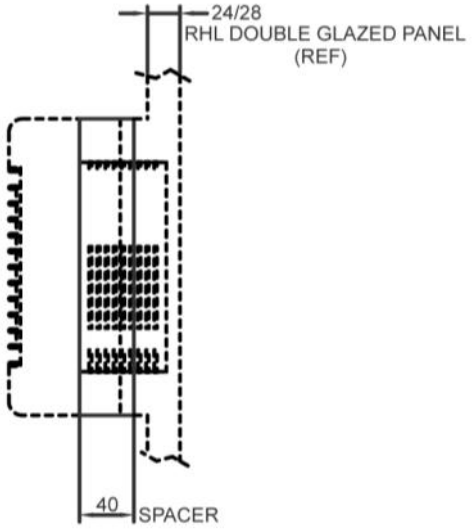
WOLF K, AS2, DRYVENT K WITH WINDOW KIT



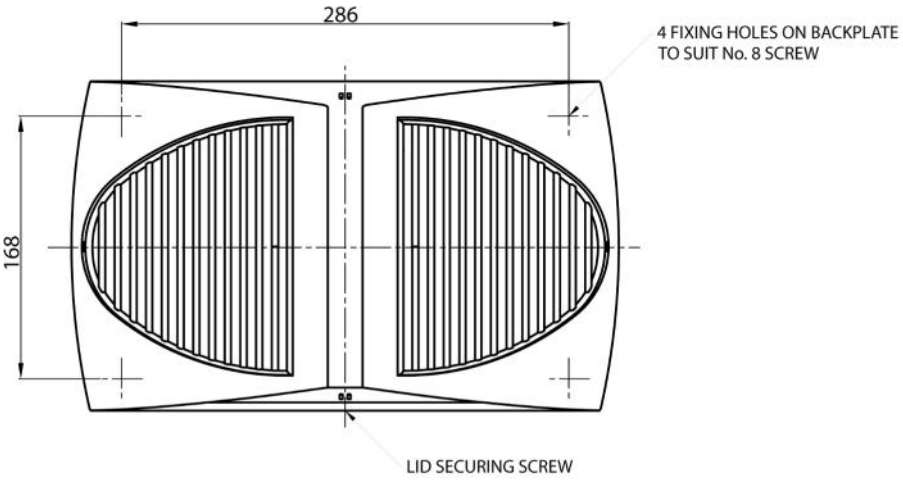
WOLF K, AS2, DRYVENT K WITH WALL KIT

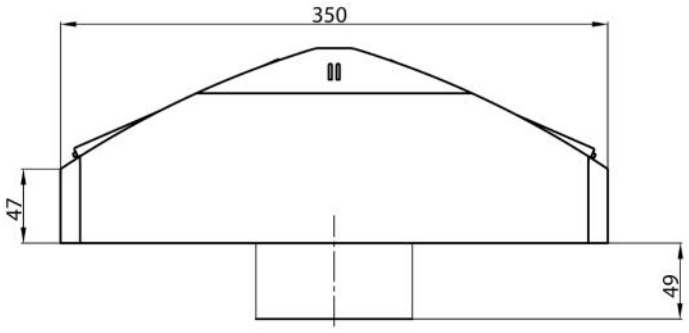


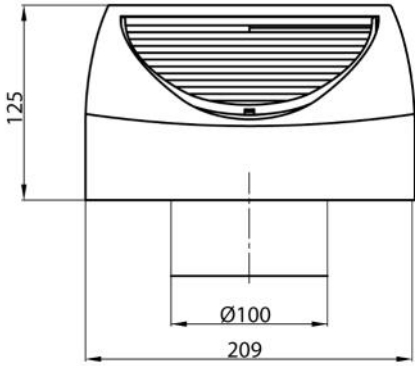
WOLF K, AS2, DRYVENT K WITH DDG KIT



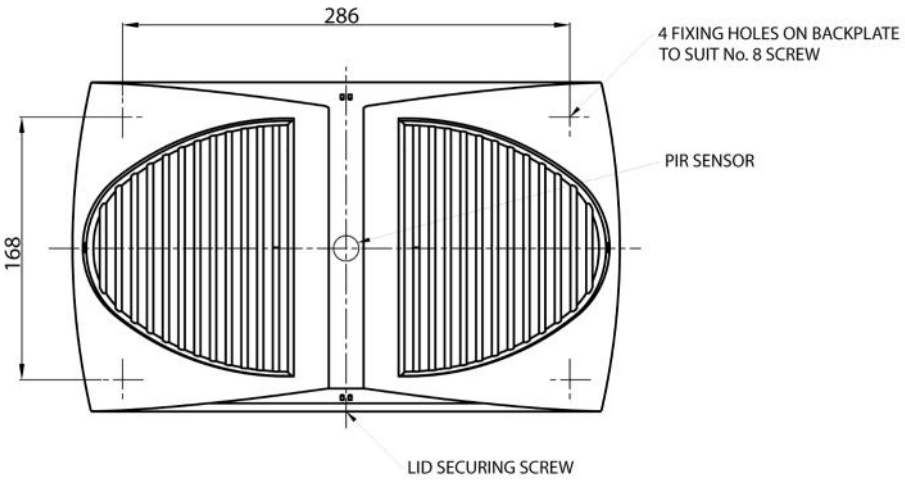
OTTER, HUSKY, DRYVENT B & X

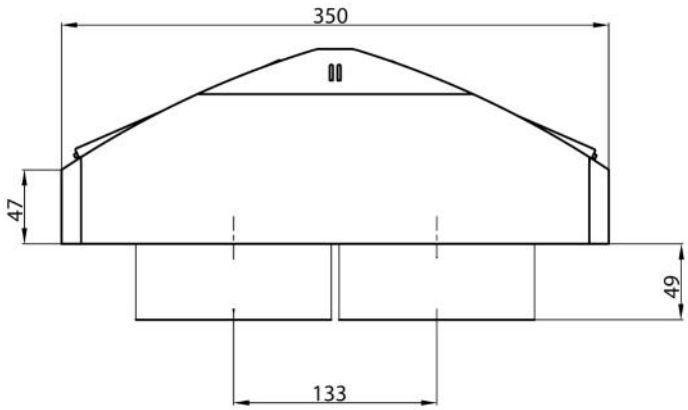


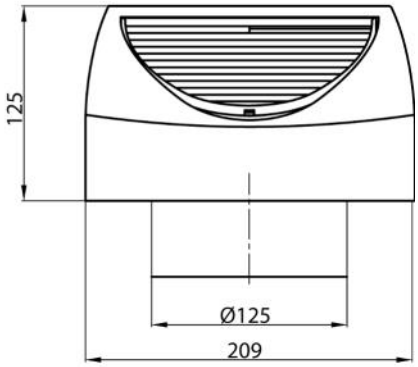




POLAR


286
4 FIXING HOLES ON BACKPLATE
TO SUIT No. 8 SCREW
PIR SENSOR
168
LID SECURING SCREW


350
47
49
133


125
Ø125
209

RHL

39 Suttons Business Park
Reading
Berkshire RG6 1AZ
United Kingdom

w: rhldirect.com
e: vents@rhldirect.com
t: 0845 124 6066
f: 0845 124 6067